Clinical Lecture
ON
TWO CASES OF CEREBELLAR DISEASE.

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MOST of you have seen a little girl whom we have of late had under our care, suffering from some affection of the cerebellum following a severe blow upon the occiput; and as I have recently had under treatment elsewhere a very similar case—similar, that is, in regard to the nature of the disease and its causation—I thought it would be instructive to bring them both before you and point out some of the distinctive features of cerebellar disease. The symptoms in these cases happen to exist in such combinations as to make it comparatively easy to arrive at the conclusion that we have to do with disease of the cerebellum, though in regard to the precise nature of the lesions there is more room for doubt. It is not, however, always easy to arrive even at the preliminary regional diagnosis in affections of the cerebellum. The clinical manifestations of disease in this part are exceedingly varied in their nature and grouping, and are occasionally—especially when the affection is acute and severe—by no means easy to diagnose from apoplectiform affections of the cerebrum.

In the present cases we have to do with subacute rather than what are usually classed as chronic diseases of the cerebellum, and the second of them is not a little instructive on account of the amount of relief which has been obtained in a progressive case of grave encephalic disease, when the prognosis was originally of so serious a character that recovery appeared almost hopeless.

Ada B——, an anæmic little girl, aged five, was sent to me here by Mr. W. W. Taunton, under whose care she had been for a short time. Towards the end of March or early part of April last year (1877), whilst playing with an elder sister, and standing on a rather high table, the patient lost her balance and fell backwards to the floor, striking the occiput severely. The scalp was not cut, but was bruised and swollen over a space about the size of a halfpenny, just above the occipital protuberance, and nearly in the middle line. The child did not become insensible, and did not cry very much at the time of the accident. During the week immediately following she made no complaint of pains in the head, and there seemed to be no fever; but the day after she was noticed to be very dull in manner, which was the more noticeable as she had previously been a very lively child. This dulness continued, and seemed to increase till lately.

A month after the accident the child was noticed by the mother to be very restless at night, frequently starting with cries ("as though from fright"). About the same time she began to have attacks of vertigo during the day, lasting from three to five minutes, in which she was accustomed to ask for support lest she should fall. A few weeks later she began to suffer from sickness in the morning, commonly as soon as she got out of bed, but occasionally before she had risen. Just before and with the sickness she usually complained of severe pains in the back of the neck and in the occipital region. The pains generally ceased with the sickness. Occasionally, however, she suffered from the pains without the sickness. For many months these fits of morning sickness continued; their frequency was variable, sometimes every day for a fortnight, and sometimes with intervals of three or four days between. Of late they have been rather less frequent.

Towards the end of last December our patient had another slighter fall against the corner of a drawer lying on the floor, when she struck and cut the skin over the left eyebrow. Towards the end of January (about nine months after the original accident) the mother first noticed that the child began to stagger as she walked, though about six or eight weeks earlier the father had noticed that she was weaker than before, and not able to walk as far as usual without asking to be carried. During the whole of this time the attacks of vomiting and cephalalgia had been continuing, as well as the restlessness at night, and the child had become thinner. A little later she was observed to fall forwards "on her face" even when she had been standing still, and to show a tendency to this when sitting in a chair—possibly from attacks of vertigo. Her speech became thick and slightly indistinct, as it is at present, and her eyes at times were different from what they had been, owing to a "kind of vacant look or stare," though no distinct squint existed.

At the time she came first under our treatment (May 10th, 1878), the patient was unable to walk across a room alone. On attempting to do so she invariably staggered and fell, neither was she able to sit upright in a chair; she was obliged to lean back in it, and her head almost always inclined to the left side, hanging over the left shoulder. A tendency to this had been observed for some months, both when sitting and standing. I will read you the notes descriptive of her walking taken by the clinical clerk, Mr. J. F. Easmon, at the time. He says: "The general character of the gait is like that of one who is only partially drunk—she hesitates somewhat at each step, and then in lifting her leg raises the heel disproportionately higher than the toes, which almost drag, and instead of treading on the flat of the soles, she uses (as is confirmed by the condition of the soles of her boots), the inner border of the left and the outer border of the right foot." She separates the feet widely, in fact, sticks out her elbows and rocks from side to side as she pursues a staggering and devious course, even though strongly supported by one hand. Some of these peculiarities in her gait you may still see when we make our little patient walk. You will notice also that when standing still she does not reel or become giddy, as an ataxic patient suffering from posterior sclerosis does when told to close the eyes. It is well for you to note this distinction, though here of course, seeing that our patient is a child and a girl, posterior spinal sclerosis is not to be thought of, even as a possible cause of the ataxic condition. The notes add: "Her head is at the same time inclined forwards, and very perceptibly to the left, not only in walking, but as she sits alone, or in her mother's lap. There is also an unsteadiness of the head whilst walking, consisting principally of a back-and-forward movement. Although one of her hands is held by her mother, she cannot walk in a straight line until the other hand is taken by her sister; even then her walk is quasi-ataxic." No defect of sight had up to this time been noted; the pupils were equal, rather large and somewhat sluggish.

The child was not admitted, but her mother was ordered to bring her to the wards to see me once a week. The following medicines were ordered: three grains of iodide of potassium, five minims of compound tincture of cardamoms, in two drachms of water, three times a day; and one drachm of cod-liver oil twice a day.

May 22nd.—No improvement. The dose of iodide of potassium to be increased to five grains, and one drachm of iron wine to be taken with each dose of the cod-liver oil.—31st: Still no improvement. The mother now notices that the child's sight is impaired—that she does not seem to see things as she should do. No other organ of special sense affected, and no alteration of sensibility over body or limbs. Examination of the eyes with the ophthalmoscope shows well-marked optic neuritis; the optic disc on each side is notably hyperæmic, and its outline is scarcely distinguishable from the surrounding parts. — June 7th: Slightly better.—14th: Patient is rather worse; she complains much of pains in the head, and has been frequently sick; no improvement in her power of walking. The dose of iodide of potassium to be increased to seven grains. — 21st: Better than when last seen, but not appreciably better than when she first came under observation. — July 5th: On the 29th and 30th ult. the patient was very sick; but shortly after the last attack, which occurred in the evening, she fell asleep, slept soundly all night, and since then there has been a gradual improvement in her general condition. She is now able to sit up without support, and seems altogether brighter than she was when last seen. Her power of walking has much improved; she reels more towards the left side, and scarcely at all to the right. She squeezes two fingers equally well with either hand. Her sight remains about the same, though the left pupil is now distinctly larger than the right. No change in the ophthalmoscopic appearances.

[The following note was taken at a later date than the delivery of this lecture. — July 18th: Patient continues to

improve. She has had no attacks of sickness and pain since those referred to in last note. She walks much better; can now walk alone, in straight line, and with much less staggering—though in doing so her feet are still spread widely apart, and her elbows are kept far away from the side (as they would be in a person making efforts to balance himself whilst walking along a narrow plank). The left eye, the mother says, "looks strange at times, and has a kind of squint," though nothing of the kind can now be detected. Movements of the eyeballs in all directions natural; pupils almost equal. Continues to become brighter and more natural in manner, and for the last three days has been able to support her head in the natural position when sitting or standing. Her speech has also improved, being now quite distinct. Sleeps soundly without starting. Appetite better, though she has not yet begun to gain flesh. To continue with mixture last ordered, and with the iron wine and cod-liver oil.]

The other patient, though presenting a history which is similar in many respects, affords an instance of a more acute and altogether graver illness, from which nevertheless she has practically recovered. I will cite the particulars of her case as briefly as possible.

Jessie J——, aged ten, was admitted under my care at the National Hospital for the Paralysed and Epileptic, on Sept. 18th, 1877. The child had been very healthy previous to an accident which occurred about five months before admission—viz, in April, 1877. She then fell down a flight of ten stairs, striking her occiput and the lumbar spine principally. The scalp was not cut, though there was a lump for a day or two. No loss of consciousness, though the patient became very pale. Complained of pain in the head for an hour or two, and, though she went to school next day, was obliged to come away early on account of pains in the head. Ailing afterwards for days, complaining at times of occipital pain, and suffering from sickness. No weakness of legs or arms. After two weeks she had another slighter accident, in which she fell from a low swing (about two and a half feet high), and again struck the back of her head. The patient grew worse after this, and in about two weeks more became subject to very severe pains in the occiput, often associated with vomiting. The attacks of sickness occurred principally in the morning when she first began to move, though they were not confined to this period. Sometimes she would have two or three attacks in the same day, sometimes none for two or three days, and then they often lasted for many hours. Though the pains were always rendered worse at the times of the sickness, to a less extent they were almost continuous—chiefly occipital, though occasionally frontal.

About eight weeks after the first accident she was admitted, on account of the continuance of the sickness and pains, into the Hospital for Sick Children in Great Ormond-street. She kept her bed whilst there, not improving, and after five weeks had a sort of fit, as the mother says. There was no difficulty in walking when she went to the hospital, though there had been an inability properly to support the head; but when she first got out of bed, about one week after the attack above mentioned it was found that she walked with great difficulty—staggering much and treading principally on her heels. About two weeks afterwards, though she was no better, she left the hospital, and continued to be brought as an out-patient for the month previous to her coming under my observation. (The fact that she had been a patient at the Children's Hospital was concealed from me at first, lest it should prevent her admission to the Queen-square Hospital.) Towards the close of her stay in the Children's Hospital the patient's sight began to fail; and whilst attending as an out-patient the mother noticed that she had become unable to make out the print of some of her own books previously read with ease. At this time the patient could only walk with difficulty and when firmly supported. The occipital pains and sickness continued as before. On Sept. 13th, five days before she was brought to me, Jessie J—— had another fit whilst in bed, in which, the mother says, her legs were flexed on the abdomen, and the hands were clenched and drawn towards the face. This lasted from five to ten minutes, whether or not with loss of consciousness was uncertain. The next day the child was very weak, and not able to sit up at all.

On admission, the following notes were taken by the then resident medical officer, Dr. H. R. O. Sankey:—"Intelligence very good. Holds her head up in a somewhat stiff position. There is no evident weakness in either arm. There is some awkwardness in the movements of both hands. When a penny is placed in her palm she is quite unable to get it between the thumb and finger without using the other hand. When told to make the forefingers of both hands meet across the body, there is a wavy uncertain movement of the arms, which is not increased when the eyes are shut. There is little if any loss of power in the legs. She walks in a peculiar way, but this varies much at different times: when at her best she walks as if intoxicated with alcohol; at other times the heels are forcibly stamped on the ground, the legs being wide apart, in an ataxic manner. In no case can she walk without some support, but at times slight aid suffices. The patient cannot quite sit erect alone, but sways about. Sensation is normal. No paralysis of face or tongue; speech natural. Eyesight failing; optic discs in third stage of optic neuritis; some swelling, and much white exudation; no hemiopia. Hearing normal." The heart and lungs were healthy, and there was no albumen or sugar in the urine. Five-grain doses of iodide of potassium were ordered to be taken three times a day, together with one drachm of cod-liver oil night and morning. Shortly afterwards the dose of iodide was increased to seven grains.

For some weeks the child remained in much the same condition, suffering greatly from pains in her head and from attacks of sickness, often repeated many times a day, and little amenable to remedies, though one-grain doses of oxalate of cerium seemed to hold this symptom a little in check for a time. About the middle of October, and thence onwards to Christmas, she became decidedly worse, and it was scarcely considered possible that she could recover. The pains and sickness were most obstinate. The sight became much worse. She could not stand at all for some weeks, and for a time she could not sit up or even raise her head from the pillow. She had no fit of any kind. Early in January the patient began to improve in all respects. By the middle of the month the headache and vomiting had entirely ceased. Soon her sight began to improve, and also her power of walking. On February 12th my colleague, Dr. Gowers, was kind enough to examine her eyes, and make the following report in regard to them:—"Left disc faintly greyish white, edge irregular, surface a little uneven; much irregular pigmentation of choroid; arteries a little below the normal size. Veins unduly pale. Right disc, same appearances; general distribution of choroid pigmentation very distinct; whole surface has a granular appearance much more considerable than normal. Discs present all appearances of atrophy after neuritis. The external sheath of vessels, especially the veins, is unduly visible, but most of the new tissue has apparently disappeared. The tint of the veins is very pale, in consequence, apparently, of the child's anæmia." On February 23rd the following note as to the child's condition was made by the resident medical officer, Mr. A. E. Broster:—"There is perfect power in both hands and arms. Is able to dress and undress herself. Both with eyes open and shut, brings the forefingers steadily and quickly together across the body. Is able to write, but says it is not so good as it was. Walks pretty steadily without assistance, though more on her heels than is natural, whilst the foot performs a kind of external flourish before being brought down. Sits erect, though occasionally she stoops much. Sight has greatly improved. No pains, no vomiting, appetite very good." Ordered to omit iodide of potassium and take instead one drachm of syrup of phosphate of iron three times a day, and two drachms of cod-liver oil twice a day.

She was discharged from the hospital on April 8th to the convalescent branch at Finchley, which she left after a month, strong and well in all respects except in regard to the mode of walking. Now she has grown more than an inch in height, is much fatter, has a good colour, is bright and cheerful, complaining of nothing. But her walk, as you will see, is still unnatural. She treads over-much on her heels, keeps her legs wide apart, reels slightly, and occasionally brings the feet down quickly. In fact, she walks in some respects as a person does on the deck of a vessel in a rather rough sea. There is, however, no giddiness even when the eyes are closed.

On account of the particular combination of symptoms which existed in these two cases, the diagnosis is, as I have said, not difficult, though this is far from being always, or even commonly, the case in instances of cerebellar disease. The forms of disease of this organ are not only most varied, but most perplexing by their dissimilarity. This is due, not

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so much to the variety of disorders induced by perversion or loss of function in portions of the cerebellum itself, as because disease of this part of the encephalon is so apt to interfere, by pressure or otherwise, with the functions of other important portions of the brain. Thus symptoms not directly referable to disease of the cerebellar texture may be by far the most prominent, and may tend to throw into the shade, or even prevent the manifestation of, such symptoms as might otherwise have been produced by the same amount and kind of cerebellar disease. In some at present little understood cases, however, the symptoms may be principally produced by altered, increased, or diminished functional activity of the cerebellum itself. Or the symptoms presented in a very large proportion of cases of disease of the cerebellum may be made up of varying combinations of these two kinds of manifestations—which, so far as they are related to cerebellar activity itself, may be classed as of *extrinsic* and *intrinsic* origin. Even in this third group of cases the symptoms belonging to the former category usually afford by far the most prominent and distinctive features of the patient's malady.

Looking therefore to the very large proportion and to the prominence of extrinsically-produced symptoms in cerebellar disease, it will be worth while, in the first place, to consider why this should be; secondly, to mention some of the symptoms which may be induced in acute diseases of this organ; and, thirdly, to call your special attention to the principal symptoms met with in the cases now before us.

(To be concluded.)

NOTES OF

TWO CASES OF DISEASE OF THE BLADDER RELIEVED BY SOMEWHAT NOVEL OPERATIVE METHODS OF TREATMENT.

BY WILLIAM ALEXANDER, M.D., F.R.C.S.

CASE 1. *Removal of numerous villous growths from the bladder; great relief for several months; recurrence; relief from a second operation, more than fourteen months afterwards.*—This case is especially and principally interesting, I believe, on account of the mechanical interference with the growths. Bryant says, in his Surgery, p. 505: "There is no cure for this affection; the surgeon can only relieve symptoms: pain and irritability of bladder by sedatives, retention by catheterism employed with extreme gentleness, and hæmorrhage by astringents, as gallic acid and iron. Astringent injections have been recommended. The disease usually destroys life in about two years." He thus expresses the mode of treatment at the present time. Billroth has removed a villous growth from a male bladder by a double opening—a supra-pubic one, and an inferior one, as in lithotomy. I cannot find any other case similar to mine recorded.[1]

That the diagnosis of villous tumour is often difficult the history of the case amply testifies. For eight years the patient had been under medical treatment, and it was never suspected that tumours existed in her bladder until I felt them with my finger. Yet the patient had consulted and had been under the care of one of our most careful and intelligent physicians for many weeks, and had been examined by clever surgeons. I had washed out her bladder many times, and had often examined the urine, without any evidence of villous growths presenting itself. After the first operation, and when the patient *saw the growths that had been removed*, some evidence was forthcoming in the assertion of the patient *that when the disease began she had observed tumours exactly similar* in her urine. Even when the tumour was discovered I had no idea that it was a villous growth, as, from the fact that she had been treated for years for cystitis, I imagined that these were growths of the mucous membrane from long-continued irritation, and similar in structure to papillomatous growths. As to the amount of relief afforded, the patient would have been dead long ago had not the operation been performed, whereas her health since has much improved, and she has grown so stout that she sometimes is afraid she is dropsical.

In males the *depth* of the bladder from the surface, the gravity of operations for reaching it, and the difficulty and uncertainty of diagnosis will always make surgical interference in them a matter for much consideration; but in females we have very little more reason for treating diseases of the bladder without an exact knowledge of their nature than we have for treating those of the uterus and vagina. The urethra can be dilated and the bladder explored by the finger without injury, and often, as in my case, with comparatively little pain. In recently diseased organs we cannot use too much gentleness; but in cases of old-standing irritation it is wonderful what an amount of annoyance the bladder will bear with impunity. A solution of nitrate of silver, ten grains to the ounce, is scarcely felt by my patient.

Ellen M——, aged thirty-six, an unmarried cook, enjoyed excellent health from birth up to the year 1868, when, without any apparent cause, her urine became red, thick, and scanty. She mentions as a cause lifting heavy weights with her bladder full, but that was suggested to her afterwards by some of the medical men whom she has consulted. Without inflicting on her much pain or injuring her constitution, and unaided by medicine, the disease in the course of some months spontaneously ceased. More than a year afterwards the symptoms recurred in an aggravated form, this time accompanied by considerable pain in the vesical region, greatest during micturition, but constantly present. The urine was thicker than before, and contained, as she thinks, blood. She consulted Mr. Hakes, who prescribed some medicine, two bottles of which she took; but, experiencing no decided relief, she discontinued all medical treatment. Soon after small masses came away, exactly similar to those removed at the subsequent operations.

After the lapse of another year she was induced to consult Dr. J. W. Steele. I happened then to examine her urine, and found it thick, whitish, stringy, and full of muco-pus. At other times it was darker, and always contained more or less blood. Her system now began to sympathise, as indicated by emaciation, dyspepsia, and anxious countenance. Dr. Steele gave her at various times copaiba, soda, pareira, hyoscyamus, matico, and iron, without producing any permanent improvement in her urinary symptoms. Being tired of treatment, she went into service for another year, taking copaiba more or less constantly all the time, her urine still keeping thick, her micturition painful, and her appetite capricious. Next, as a patient of Dr. Carter's at the Southern Hospital, she again came under medical treatment, both local and general. She felt much relieved at the time, and her urine improved considerably. However, before leaving the Convalescent Home, to which she was sent from the Southern Hospital, her symptoms had returned. She remained in service for a time till the beginning of 1876, when she consulted me.

The examination of her urine, &c., and the history of her case, caused me to diagnose chronic cystitis, and as she was still in service, and did not want to leave her place, I prescribed many of the various remedies mentioned above. Copaiba she could not now take in any form, and for it I substituted oil of santal-wood, with a beneficial effect. No real success resulting from about four months of this treatment, I advised her to leave her situation, and take apartments in town, where I made a thorough examination of the pelvic viscera. These organs were in a very relaxed condition, so much so that, the patient being in the obstetric position, I was enabled, without the infliction of much pain, to insert my finger into the bladder. I found the floor of that viscus extremely rough and irregular. These irregularities were of various heights. A few were as much as a quarter of an inch from base to apex, and one seemed to me nearly an inch in height. This large one on the left side of the bladder had a rounded, enlarged apex; the others had the apices thin and pointed. Small crystals could be felt in several places between the papillæ. Next day, at my request, Dr. Carter examined the patient in the same manner, and we came to the conclusion that the removal of the growths was not only justifiable, but advisable. Accordingly, in July, 1876, the patient being under the influence of chloroform, and with the assistance of Drs. Carter and Clarke, I dilated the urethra with an anal speculum, passed the wire of an écraseur round the base of the largest growth, and whilst I kept the wire in position with my finger, Dr. Carter tightened it. The tumour was cut through without

[1] In THE LANCET of Jan. 19th, 1867, I see that there is a report of a case where the growth was removed by Professor Kocher from the male bladder, but I cannot find any case of removal of a villous growth from the female bladder.

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producing any feeling of resistance to the operator, and whilst I was trying to get it out, others were displaced from their place of growth by the movements of my finger. Acting upon this hint I scraped off with my finger all the nodules I could find, and then washed the bladder out with a weak solution of perchloride of iron. There was a fair, but not an excessive, amount of hæmorrhage during the operation, and the urine contained a good deal of blood for the first week. The patient scarcely suffered any constitutional disturbance. She had incontinence of urine for two days only, during which scraps of the tumour came away. There were about two dozen small growths removed, and five or six growths were lost.

The narration of the daily observations would be tedious, and would serve no good purpose; suffice it to say, after the first few days, during which I thought it better not to irritate the viscus further, the bladder was washed out frequently, at first with a weak solution of carbolic acid, afterwards with very dilute solutions of nitric acid, and once or twice with perchloride of iron. The urine, and especially the patient, gradually improved; the pain in micturition became much less, and after a stay of two months at the Convalescent Home at Woolton she (four months after operation) resumed her vocation as cook.

In the winter of 1876–77 she consulted me on several occasions for "dropsy." This, I was able to assure her, was only obesity, and was a sign of well-being. Her urine at this time always contained a trace of cloudiness. In the spring of 1877 I put her on milk diet. This she faithfully carried out during the month of March, and with the effect of rendering her urine for many days perfectly clear. Towards the end of May sickness in the house where she was employed increased her daily labours very much, and, by some mismanagement, she slept one night in a damp bed. The result was a "bad cold," thick urine, painful micturition, and a complete relapse. By milk diet and santalin internally, and local injections of dilute nitric and carbolic acid lotions, I was able to mend matters to a certain extent; but, as I had not much confidence in this mode of relief, and feeling satisfied that the removal of the growths was the only remedy, she, on October 5th, again took apartments in town. I now very easily passed my finger into the bladder, and felt numerous soft growths upon and beyond the trigone. But for her nervous temperament I might have scraped off the growths without the administration of any anæsthetic. Dr. Clarke administered ether, and about a dozen small, arborescent growths were easily removed by the finger-nail. Little hæmorrhage occurred, the bladder was washed out with a weak solution of carbolic acid (1 to 60), and an opiate prescribed to be given in case there should be much pain. Next day I found that the patient only suffered from incontinence of urine for a few hours, that several small growths had come away during the evening, that she had suffered little pain, slept well, and expressed herself able to return to work immediately. Next day (October 7th) she complained of a swollen varicose vein of the leg, which annoyed her much for the next few weeks. On October the 19th the urine was perfectly clear, the pain on micturition was almost gone, and, but for the state of the veins of her leg, she could have gone to work. In consequence of this last affection she went to Woolton, and then to work. Her urine remained quite clear for a month after operation till during a menstrual period a slight cloudiness appeared. Then for the first time since the operation local appliances were used, and consisted in the injection of nitrate of silver solutions, at first three grains to the ounce, gradually increased, until at the present moment she injects every morning two drachms of a solution ten grains to the ounce. Soon after this she was attacked with general eczema of face, arm, and especially the right leg, the seat of the varicose vein, in consequence of which she returned to town, and was under my care for some time. Her urine still keeps a little cloudy, and sometimes contains gravel, which annoys her, especially in micturition. It is always thick at the menstrual periods. Her health is good and her system well nourished, and she is content in the conviction that though the disease may return she can obtain relief, by what she now looks upon as a comparatively trifling operation. On microscopical examination the tumours last removed present the appearances characteristic of villous growths.

In May last I again removed a large mass of diseased growths. The recovery was more rapid and more perfect than on either of the previous occasions. The urine has continued clear ever since.

CASE 2. *Perineal section (Mr. Cock's modification) performed for chronic catarrh of the bladder, the result of stricture and enlarged prostate; considerable benefit.*—James R——, aged fifty-two, admitted into hospital June 4th, 1877, suffering from stricture of the urethra, difficult micturition, and vesical catarrh. As he had suffered from the stricture for the last twenty years, and the canal of the urethra was hard, indurated, and tortuous at the junction of the membranous and spongy parts, it was determined to treat it by forcible dilatation with Holt's instrument. This was accordingly done next day. A large catheter was passed over an enlarged prostate, and the distress and dysuria of the patient were considerably abated. On account of the enlarged prostate, the bladder never completely emptied itself, and in spite of repeated washings the catarrh continued. The difficulty of passing an instrument, the pain and spasms brought on by its introduction, caused the washings to be performed as seldom as possible.

By the 18th September the patient was in a pitiable condition. Although he was much relieved for twenty-four hours after the bladder was washed out, the idea of the next washing caused him more mental anxiety and distress than the operation itself. He likewise suffered from many symptoms of urinary obstruction, and his end was not far off unless relieved. I therefore explained to him the nature and risks of the following operation, and the benefits to be expected from it, to the performance of which he willingly, even joyfully, assented.

As the apex of the prostate could be distinctly felt, I dispensed with the introduction of a staff, and introduced my finger into the rectum, with the tip touching the apex of the prostate. I then plunged a knife into the perineum, opened the urethra in front of the prostate, slightly incising the latter, and through the opening thus made passed a catheter into the bladder. The patient experienced much relief, and improved considerably afterwards. The bladder could now be easily washed by the perineal tube, the washings coming out by the urethra. He improved for some time both in health and spirits, until before Christmas, when he began to emaciate and his limbs to swell. He died on Jan. 4th, 1878, from gradual emaciation and exhaustion, accompanied by vomiting and heartburn.

The greater part of four months (since the operation) were passed by him in comparative comfort when contrasted with his sufferings on and shortly after admission, and I have no doubt that two or three months were added to his life by the mode of treatment adopted. That the benefit was so limited is, I think, sufficiently explained by the necropsy as well as by the duration of the disease. On post-mortem examination, we found the bladder enormously hypertrophied. Its mucous membrane was ulcerated deeply in various places, some of the ulcers being large and deep, others small and superficial. The sigmoid flexure of the colon was glued by inflammatory effusion to the fundus of the bladder, at which point a deep vesical ulcer was situated. On attempting to separate the colon from the bladder, the base of the ulcer in the latter ruptured, showing that it had almost eaten through the coats. The prostate was enlarged, and contained cavities filled with thin, muco-purulent fluid, and in one place a phosphatic calculus. In the right kidney the calyces were moderately dilated. In the left the calyces were enormously dilated, only a thin margin of kidney substance remaining on the walls of the large cyst into which the kidney was changed. The mesentery was well covered with fat, although the face and body were emaciated. The other parts of the body exhibited nothing worthy of notice.

Liverpool.

ON DIPHTHERIA, FROM A PREVENTIVE-MEDICINE POINT OF VIEW.

BY W. N. THURSFIELD, M.D., S.SC.C. CAMB.

(Concluded from p. 181.)

DISSEMINATION OF DIPHTHERIA.

SPACE will not allow me to go into the question as to what constitutes the infection element in diphtheria, and in what way it may be connected with the low form of vegetable growth observable on the surfaces affected, but I shall confine myself to the ascertained modes in which this infection is spread and how it may be arrested.

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It is my experience that the disease spreads solely through the ordinary channels of infection, and is not disseminated by means of mysterious atmospheric agencies, as is too frequently assumed. Diphtheria is, like other infectious diseases (perhaps more so), subject to an increased tendency to spread at one time more than another, owing to influences which, though probably connected with the individual, for want of a better name we call "cosmical." But, under ordinary circumstances, it has seemed to me that diphtheria is a very tangible and controllable infection, and that the distance through which the infecting agencies can travel through the air without becoming inert is very short. Of this I recently saw a striking example. Diphtheria was brought into a village, and, the first case being mild, grew into an epidemic before the village day-school was dissolved. In this village was a large school where pauper children from various unions were boarded and educated. This class is certainly not the least susceptible to infection in the community. Now, although several cases occurred within a few yards of this establishment, and a great many in the village, not a single case occurred in the boarding school.

The infecting element is probably given off in chief from the throat with the breath, or with the expectoration, and may thus get conveyed to the sewers; but, having regard to the observed pathological fact that the specific inflammation may, to a greater or less extent, spread over the digestive and even the urinary tracts, we need go no further to find a ready means of accounting for two modes in which the infection gets disseminated—namely, through specific contamination of sewers and of collections of excreta in latrines. Of both these modes of dissemination, especially the former, I have seen many marked instances. On one occasion, when called to investigate a case at a detached and perfectly isolated house in the country I found the patient had been to a neighbouring town, and had entered and been exposed to sewer gas in a house on a short line of sewer, which I knew had become specifically contaminated by diphtheria. The owner of the property instructed a surveyor, residing some little distance off, to examine this sewer. He did so, and for that purpose had it opened, and was much exposed to the gas, and the second or third day after I received information that he was struck down with an attack of diphtheria, from which, and from its more remote sequelæ, he has suffered severely. As regards its dissemination by sewer gas, diphtheria has seemed to me to follow precisely the same laws as typhoid fever, especially in the fact that they both will attack with greater virulence and readiness new comers to an infected neighbourhood. From the latrines and sewers the *materies morbi* may readily, in some cases, obtain access to wells, which I believe may become specifically contaminated, though I have not absolutely proved it. In such cases the infection may be disseminated by the water, and therefore, like typhoid fever, by means of milk or any other fluid with which the milk may be mixed. Apart, however, from any question of admixture with impure water, having regard to the readiness with which milk absorbs volatile organic matter and the infecting material of certain diseases by mere exposure to an infected atmosphere in a confined room, and to the apparently tangible nature of the infecting elements in diphtheria, I believe that milk which had been kept in a house infected with diphtheria would form a ready mode of disseminating the disease.

The infection is most portable; this is a very important point which has generally been either overlooked or disputed altogether. I have no doubt about it whatever, and indeed I believe the infection of diphtheria to be as portable as that of any disease with which we are acquainted. I have known it taken to a house by a person living in an infected house, but not at any time suffering herself, but who went to visit a person a mile or two off, involving a considerable walk and a passage by ferry across a river, and only remained a short time in the house, but sufficiently long to leave the germ of diphtheria, which broke out a day or two afterwards. I have known it taken from one house to another a long distance off, and between which there was no other connexion, or indeed any possible source of infection, by a woman who had simply been to fetch some yeast. Other remarkable instances I could give if necessary. The infection can certainly be taken from a corpse, or at least from its adjuncta; and, as in the case of small-pox, I believe it is specially liable to spread from such a source. I have known a coffin-maker take the infection home to his children after measuring a corpse, and another instance in which a woman who went to help to make shrouds contracted the infection. The infection will not only remain in unscavenged collections of excreta, and in the air of closed sewers, but will attach itself to articles of clothing and furniture, and most persistently to wall-facings, and indeed seems to have a special predilection for so doing.

From the above it will be seen that, although the modes of dissemination of diphtheria are numerous, powerful, and subtle, there are none which do not admit of being controlled by disinfection carried out with precision. Of all diseases this is the one most liable to be spread by schools, and the reason, I think, is not far to seek, because the disease is frequently so mild as not to keep children from school, and may present no external indications. Moreover, the infection is peculiarly liable to be spread by the breath, and may indeed, I believe, remain, and be disseminated by the throat after children are sent back to school apparently well. I would suggest as a matter of ordinary practice that, as soon as any cases of infectious sore-throat have occurred in connexion with a day school, that school should be closed for a sufficient number of days to cover the ordinary period of the incubation of the disease. For this purpose one week would be sufficient, provided the school walls and latrines are thoroughly cleansed, and the utmost caution observed in readmitting convalescents.

ORIGIN OF DIPHTHERIA.

I wish to avoid expressing a belief in the *de novo* origin of disease, as that doctrine is commonly understood, but the arguments in favour of that view are far stronger in the case of diphtheria than in scarlatina or typhoid fever, and whilst, as regards the two last-named diseases, the number of cases in rural districts in which you cannot directly trace the source of infection is not more than would be anticipated on the theory of probabilities, with diphtheria the case is far otherwise, and all who have been called upon to investigate many outbreaks of diphtheria must have met with cases in isolated houses which seemed to admit of no other explanation. The researches which I have made in reference to these cases in old registers seem to me to show clearly that in all these cases, if we trace the habitations far enough back, we shall meet with previous outbreaks in the same house; and there are certain parts of the country where diphtheria may be said in this sense to be endemic, and where certain houses can be shown to have suffered repeated attacks at intervals of years. Now, it is my experience that there is one condition in common to all these places, needing only an exciting cause to bring and develop diphtheria. That this exciting cause need not be the importation of the specific infection of diphtheria I am confident, though if imported into such a locality diphtheria will flourish most vigorously. The immediate stimulus is to be found in the individual himself, and I believe under certain bodily conditions an ordinary cold is sufficient. I have repeatedly seen typhoid fever imported into such a locality give rise to an outbreak of diphtheria instead of typhoid fever. I have, at least on one occasion, seen scarlatina do the same. I have also seen a convalescent from parturition develop and spread diphtheria, and I have once seen it follow an injury. The disease is infectious from the commencement of the outbreak, but the power of the infection appears, as I have pointed out previously, to be occasionally intensified by circumstances connected with the individual.

As typhus fever in its incidence and endemic form is connected with dirt and overcrowding, as in the same way enteric fever is connected with sewer gas, so diphtheria in its incidence and endemic prevalence is specially connected with dampness of habitations. Whether these results are from development of a specific disease on the application of a certain stimulus to a favourable soil, or from the infection of previous attacks, remaining dormant and revivified by the same stimulus, is a question easy to speculate upon, but difficult to decide.

Space, however, will not allow me now to pursue this subject further, which is perhaps all the better in a paper intended to be above all things practical.

The chief points I have wished to bring out are:—That diphtheria everywhere prevails inversely to typhoid fever, with which disease it is closely allied, although an attack of typhoid fever affords no protection from a subsequent attack of diphtheria, nor *vice versâ;* that when introduced

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into a town diphtheria may become epidemic, and be disseminated by precisely the same channels as typhoid fever; that the infection may be conveyed into any house by sewer gas, or otherwise, altogether irrespective of dampness of structure, but that its endemic breeding-grounds are to be found in certain well-defined spots in rural districts, where it is constantly liable to break out as if *de novo*, and that the constant condition of these localities is structural dampness of habitation.

ON THE

SELECTION OF THE MOST APPROPRIATE TIME FOR OPERATING IN CASES OF CONVERGENT STRABISMUS IN CHILDREN.

BY JAMES E. ADAMS, F.R.C.S.,

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THERE can, I think, be little doubt that when children begin to squint, the question as to when they shall be submitted to operation, and how they should be managed previously to it, has often to be put to persons in practice who are not specialists, and, judging from my own experience, does not always receive the consideration which it merits. Much uncertainty seems to me to prevail in the profession generally on this subject, and the text books do not put the matter very clearly. All of them explain the theory and the method of the operation well enough, but they afford no information as to when it becomes essential to do the operation, and when it may be done most advantageously to the patient.

The importance of this subject does not rest on the question of appearance, but on the maintenance of a normal standard of visual acuity in both eyes; and it is most grievous to have to operate on so many cases as we do in which the acuteness of vision of the squinting eye has greatly fallen off. One cannot too strongly insist that the squinting eye is disused, and must, unless the squint is alternating or proper precautions be taken, become amblyopic. It must be understood that I am speaking only of the concomitant convergent strabismus of hypermetropic children. Now the cure of this condition does not consist in removing the deformity so as to be no longer visible; but our object is to restore binocular vision for all distances, and we can make no certainty of doing this unless the two eyes have at least nearly an equal acuteness of vision. When it happens that we have to deal with a case of alternating strabismus (in which the two eyes with equal use remain equally good), we may predict with certainty that, after correcting the hypermetropia with glasses, the squint will diminish, and that a subsequent tenotomy will produce a complete result. But when one eye is amblyopic the case is quite different; the deformity may be removed, but the result is at best imperfect and uncertain, because, as is well known, the perfecting of the operation depends on the fusion of double images by instinctive co-ordination on the part of the patient.

The answer to the question as to *when* the operation should be performed should, in my opinion, be as follows:—It should be postponed until the child is old enough to wear glasses, *provided* that the acuteness of the deviating eye can be maintained by regular daily exercise at reading &c., the sound eye being *completely excluded for half the day*. In practice it will be found that this rule is not applicable to children of all ages, but applies well to those between four and seven, provided that those in charge of them carry out the instructions to the letter. When the young hypermetropes do not commence to squint till they are seven or eight years old, it generally happens that their education has so far advanced that we can judge of their acuteness of vision, and they are usually brought to us before this has deteriorated. They can be trusted with glasses, which, either with or without tenotomy, suffice to effect a cure. These patients should therefore be thoroughly atropised, the errors of refraction corrected, and proper glasses given to them for some weeks before the operation is decided upon. But with children younger than this—say from three to seven years old—the wearing of glasses is attended with many obvious drawbacks, and it is for children about this age that I especially advocate the education of the deviating eye as above suggested.

It is, however, surprising how difficult it is to make those in charge of the child understand the importance and the object of this plan, even in the case of people in good position, and it seems as though it were impossible to eradicate the idea that this method is intended to cure the squint. Last year I had a case of a boy at four, who had squinted for about six months, and who had V. $\frac{12}{18}$ in R., and $\frac{12}{18}$ in L., Hm. = $\frac{1}{12}$, and for whom I adopted the above plan. At the expiration of ten months he was brought to me again, with the statement "that he is no better," and I found upon inquiry that the exclusion of the non-squinting eye had been very imperfectly carried out, the result being that the vision of the squinting eye had come down to $\frac{12}{36}$.

Notwithstanding this example of the difficulties of the plan, I still maintain that this is the best method of dealing with these cases. Unfortunately it happens frequently that children begin to squint earlier even than this, often within the first twelve months, and here we cannot expect this treatment to be carried out. It therefore becomes necessary here to operate as soon as the squint has become confirmed, unless it happen to be an alternating squint, and even then it must be *proved* that one eye is used as much as the other. We must operate with the hypermetropia uncorrected and the vision undetermined, rather than leave the one eye to a certainty of deterioration.

In my suggestions as to the ages at which the plan above proposed is to be adopted of course I do not wish to be understood literally, but discretion is to be used according to the character of the particular child in question.

Finsbury-circus.

ERGOT IN THE TREATMENT OF ANGIO-PARALYTIC MEGRIM.

BY DR. SCHUMACHER.

OF the numerous theories proposed to explain the peculiar symptoms of megrim, that which attributes this to an affection of the cervical sympathetic appears to be the most plausible. Du Bois-Reymond and Brunner, themselves subject to the disease, assume as its immediate cause a tetanic contraction of the cerebral vessels due to an irritation of the vaso-motor nerves, whereas Möllendorf holds that it proceeds from dilatation of the vessels in consequence of a paralysis of those nerves. Both views seem correct, and there is every reason to believe in the existence of two forms of megrim, an angio-tetanic and an angio-paralytic.

It follows, therefore, that the treatment of megrim must vary according to the nature of each case. For while the angio-tetanic form of the disease would be relieved by nitrite of amyl, the angio-paralytic can be benefited only by such remedies as serve to contract the cerebral blood-vessels. Upon this ground Eulenburg recommended ergot of rye in the treatment of the latter form, and the favourable results obtained from the exhibition of that drug have been confirmed in America, England, and Germany. As there are, however, but few cases on record showing the benefit to be derived from ergot in angio-paralytic megrim, I think the following may not be uninteresting, distinguished as it is by its long duration and its great resistance to all other methods of treatment:—

Mrs. S——, of Aix-la-Chapelle, aged forty-nine, of a rather feeble constitution, and affected with kypho-scoliosis for the last fifteen years, enjoyed tolerably good health until the end of 1873. At that time the menses ceased, and she began to suffer from intermittent but violent palpitation, usually occurring at night, and accompanied by painful oppression of the chest—symptoms resembling those of angina pectoris. There was no history of either gout or rheumatism. The kidneys were healthy, but the heart was enlarged in its transverse diameter, inasmuch as the cardiac dulness exceeded the right sternal border and also the nipple line for about one centimetre in each direction. The heart-sounds were normal; the pulse was 80, and rather weak. I concluded at the time that the case was one of dilatation of the heart in consequence of the kypho-scoliosis and the compression of the lungs.

In January, 1874 Mrs. S—— began to complain of severe

headache on the right side. Without any known cause it generally came on after midnight, when she was roused by it from her sleep, and then kept awake for several hours. Bicarbonate of soda, rhubarb, and small doses of morphia, gave her immediate, but only temporary, relief. About the end of January the palpitations ceased altogether, but the nocturnal headache increased in violence. The headache now regularly returned every night between two and half-past two o'clock. It was mainly situated in the right occiput and thence spreading to the forehead. There was a feeling as of a heavy pressure upon the eyes, a forcible pulsation of the right temporal arteries, and a distinct rise of temperature on the affected side of from 0·3° to 0·4° C. Gradually the pains subsided towards the morning. At my morning visits I found the patient greatly fatigued, and, as the sole objective symptom, an injection of the vessels of the right sclerotic, which, however, disappeared in the course of the day. As the attacks seemed to be of a typical recurrence, I therefore ordered large doses of quinine, but without any benefit. Caffein not only gave no relief, put produced also nausea and sickness. The induced current also failed, but the treatment by means of the constant current (stable current of from six to eight elements applied for from eight to ten minutes) seemed to be, for a time at least, most successful. During three weeks the electricity was applied about twelve times, and the intensity of the pain greatly diminished; no attack appeared in the nights following the days on which electricity had been used, and the intervals between the attacks also increased from three to four days. The treatment, however, was unfortunately interrupted, whereupon the headache returned with its former violence. Again the patient was roused between two and half-past two o'clock; again the pain started from the right occiput, radiated to several branches of the trigeminus, accompanied by a humming noise in the right ear, beating of the arteries, and rise of temperature on the right side. Again the constant current was applied, without, however, producing the same favourable results as before. Iodide of potassium and the nervine tonics were then tried, but they failed to relieve the distressing symptoms.

Upon the supposition that the case was an affection of the sympathetic nerve, and that the headache was due to a paralysis of the arteries, I had in February, 1874, begun to give the ergotine de Bonjean, but the doses were small and the results not at all satisfactory. Meanwhile Eulenburg had recorded (*Berl. Klin. Wochensch.*, 15, 1873) a case of intermittent headache with disturbance of circulation—cephalalgia vasomotoria—which was completely cured by large doses of ergotine. As the symptoms of that case resembled those of the one just described, six grains of ergotine were at one time given per diem, and this quantity was gradually increased to twelve grains. The exhibition of one drachm and a half in the course of two weeks was followed by an abatement of the symptoms; for though the headache returned every night, it was less violent than before. From the 15th of April, 1874, the daily quantity of ergotine was increased to fifteen grains, and after the patient had thus consumed two drachms more of the drug the attacks had a much shorter duration and were much less severe. The above dose of fifteen grains was continued for one month. During that time the ergotine produced no disturbance of the general health, while the headache gradually subsided, so that towards the middle of May the patient was discharged as cured. She had taken not less than seven drachms of ergotine in a very short time, and has ever since been free from any of the angio-paralytic symptoms.

Aix-la-Chapelle.

CONTRIBUTIONS TO PLASTIC SURGERY.

BY SURGEON-MAJOR J. M. FLEMING, M.D.,
BENGAL MEDICAL DEPARTMENT.

(Concluded from p. 179.)

CASE 7. *Restoration of the Chin and Lower Lip.*—Harju, aged thirty, a hill-man, employed as a jhampan-bearer, was brought to the Simla Dispensary on the evening of Oct. 2nd, 1877, on account of a very severe gunshot injury of the face. The lower jaw was smashed, and the soft parts covering it, including the right half of the lower lip, were completely torn off. The tongue had escaped uninjured, but, from want of support, hung down on the neck, amidst shreds of muscles and integument and fragments of the shattered bone.

The comminuted fragments of bone having been removed, the remains of the lip were brought together with a twisted suture, and an endeavour made to close the wound as far as possible. Sloughing, however, ensued, and a hideous gap resulted.

Fig. 8 shows the appearance on Oct. 18th, sixteen days after the accident. On that date a plastic operation was

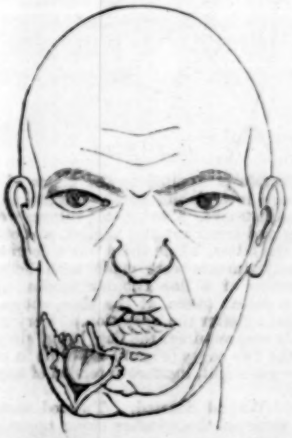
FIG. 8.

resolved on, which was divided into two stages: (*a*) restoration of lip; (*b*) complete closure of wound. The following are the details.

On Oct. 18th, 1877, healthy granulation having been established, the patient was placed under chloroform, and, the remains of the lower jaw being found necrosed as far as the angle on the right side and the socket of the first molar tooth on the left, the bone was removed to that extent with saw and forceps. The cut extremities of the lower lip, having been pared, were then brought together with a harelip pin and two silver sutures, and the wound strapped with court plaster.

Oct. 23rd.—Outer bandages changed; strapping on lip not interfered with.

FIG. 9.



26th (eight days after operation).—Strapping removed for the first time. Complete adhesion of the lip has taken place. Harelip pin, being loose, was removed. Sutures allowed to remain.

31st.—Sutures removed. The lower lip has completely

united, and the wound beneath it is reduced to less than half its original size. Figs. 9 and 10 give the appearance on this date.

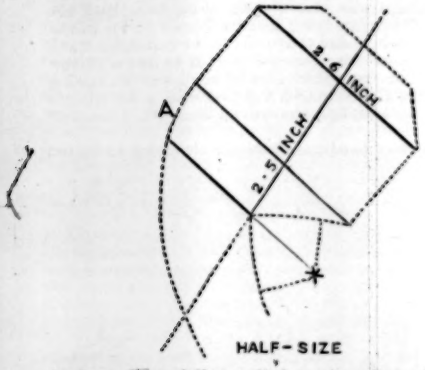
After the union of the lip an opening into the mouth still

FIG. 10.

remained, of an irregularly triangular shape, and surrounded by hard cicatricial tissue, as shown in the above sketches. The gap measured 1·3 in. by 1·1 in., and allowed of the protrusion of the tongue, under which the cut ends of the genio-hyo-glossus and genio-hyoid muscles could be seen.

On the 31st October the patient was placed under chloroform, and a flap of skin with a curved pedicle (of the size and shape shown in Fig. 10 *a*) was taken from the right

FIG. 10 *a*.



cheek, and carefully applied to the edges of the wound, which had been incised and partly everted, so as to admit of accurate adjustment. Two twisted sutures were employed (at the upper and lower anterior angles), and one silver-wire suture near the latter, where there was a depressed cicatrix. The other adjustments were made with horsehair, introduced by means of a fine tubular needle. (Fig. 11, reduced from a sketch taken at the time, shows the appearance immediately after the operation.) Very little twisting of the pedicle was required, the flap being simply folded on itself until the two edges (Fig. 10 *a**) came in contact. The hæmorrhage was slight, ligature or torsion of any vessel being unnecessary.

Nov. 4th.—Wound dressed. Twisted suture at upper angle, and some of the stitches along upper and anterior edge of flap, have given way. Anterior edge of flap deeply discoloured. Remainder looks healthy, and is in good position.

8th.—A slough, half an inch in breadth, has separated from the anterior edge of the flap. The remainder is quite healthy, and its edges granulating. Wound on cheek covered with healthy granulations. Skin beginning to extend from the edges.

10th.—Flap elongating. Can now be drawn across lower

FIG. 11.

part of wound. Granulations on cheek level with the skin. Sprinkled lightly with burned alum.

16th.—Union of the lower half of the wound has now taken place by the *second* intention. Only a small triangular space remains at the upper end, insufficient to admit the tip of the little finger.

Dec. 8th.—Wound quite closed. Cheek rapidly healing.

This man left the dispensary all but well, and has since been favourably reported of.

Simla.

THE PROPHYLACTIC TREATMENT OF POST-PARTUM HÆMORRHAGE.

BY ALEXANDER M'COOK WEIR, M.D., &c.

MR. GROSE relates an interesting case in THE LANCET of November 17th last, in which the subcutaneous injection of ergotine (Bonjean's) was successfully used in post-partum hæmorrhage. In a postscript to the article in question will be found a decided reply to a query of mine published in THE LANCET some two years ago. This query had reference to the treatment of hæmoptysis by the subcutaneous injection of ergotine, instead of the roundabout and uncertain methods usually adopted. Mr. Grose is equally positive on the reliable effects of ergotine thus given in uterine hæmorrhage and hæmorrhages from the alimentary track. I am convinced, however, that there is yet much to be said on the prophylactic treatment of post-partum hæmorrhage. No doubt the administration of chloroform had much to do with the extreme uterine inertia, and the temporary removal of the bandage (thus leaving the uterine walls unsupported, so to speak) was the immediate cause of the hæmorrhage in Mr. Grose's case.

Latterly, and more especially since reading Dr. Playfair's very excellent book, I have been in the habit of keeping up continuous uterine contraction during the conclusion of the second and until the end of the third stage of labour. This is a good general rule to adopt, and is not difficult to carry out in practice. If the labour be sufficiently advanced, and the pains, from any cause not within the scope of a digital examination, begin to hesitate, and finally disappear, I invariably administer a full dose of Richardson's liq. secalis ammon., which can be repeated in about half an hour, provided one dose has failed to stimulate the uterus into action. This is a beautiful preparation of ergot, and is not disliked by patients; it is void of the *nauseating* effects of other pre-

parations, and has the advantage of being more active and reliable in its operation. It is conveniently given in a cup of tea, and, from the presence of free ammonia, is slightly stimulating beyond its specific effects. Like other preparations of ergot, it will produce "cramp" if given to excess, and before the os is sufficiently dilated—i. e., if given too early in labour. I have given it as a mixture every two or four hours (depending on the urgency of the case) in various miscarriages with undue "loss," and it has seldom failed to expel placental débris, clots, &c., securing contraction, and cutting short the hæmorrhage. As I have stated, it does not sicken, and at present I do not know a better therapeutic agent in simple uterine inertia. Therefore, I have no hesitation in pronouncing it a valuable addition to our means of averting and limiting post-partum and other uterine hæmorrhages.

But we cannot rely on ergot alone. In order to keep up continuous uterine contraction, the left, or disengaged hand, should be planted firmly on the fundus uteri, which should be followed in its descent as the child clears the lower outlet. As both hands are likely to be engaged at this stage of the labour, the hand of a nurse should be placed in the same position, and if not frequently reminded she will be pretty certain to relax her hold. No time should be lost in separating the child, and replacing the hand on the partially emptied, and consequently less perfectly supported, uterus. Squeezing should not be immediately practised with a view to expelling the placenta, which, as a rule, will soon separate and be found in the vagina or the bed. This is indicated by a further recession of the fundus uteri, which is now low in the pelvis. I have hitherto omitted to mention "the cord," as I know the eagerness with which the inexperienced and impatient hand will grasp it. I am convinced, after one or two sad experiences, that to drag, pull, or even touch it with a view to hasten the separation of the placenta, is reprehensible and pernicious practice. A uterine squeeze may be necessary to facilitate the separation, but an automatic or voluntary expulsion on the patient's part generally completes the act. We now suppose that the womb is empty and uniformly contracted. The nurse will reach the binder (which should be at least fourteen inches wide, and five feet long), rolled up like a bandage, to facilitate its passage around the patient's loins. When placed in position across the abdomen, the uterine hand must be removed, and the binder quickly carried around, and securely fastened with stout safety pins. Attention should now be given to the pulse, and if about 100 per minute, another dose of ergot should be given, and the result carefully watched. A steady pulse of 80 or 90 after the lapse of an hour need give no alarm. Perfect rest, however, in the recumbent posture for another hour or two is very advisable if there be suspicious symptoms, such as much gaping, rolling of the eyes, and occasional sighing. In this position there is greater command of the uterus, and the abdominal muscles resist less than when the patient is on her side. If there be premature drowsiness, putting the child to the breast is a good corrective and is said to be prophylactic of hæmorrhage.

The question now arises—To what extent does ante-partum exhaustion predispose to post-partum hæmorrhage? If our knowledge was precise enough, we could no doubt tell the exact time to interfere with the normal course of labour in order to save the mother the consequences of a fruitless task. Another question is—Are we justified in yielding to a patient's entreaties for chloroform when we know that to destroy volition is to efface the earliest and best symptoms of exhaustion? I take for granted that few voluntarily incur the serious responsibility of administering it on any occasion; and as chloroform becomes better known and appreciated as a damper of vital force, a paralyser of the vaso-motor nervous system, and therefore a powerful predisposer to hæmostatic congestion, I think fewer still will sanction its use during parturition. Among the earlier symptoms of exhaustion may be mentioned general uneasiness, flagging pains, cries for help, a rising pulse and temperature, frequent retching, and a disconcerted countenance. If to these succeed cessation of the pains, sickness, and a pulse of 120, it is time to complete delivery.

I do not know any general rule of time applicable to parturient women. Cases must be judged on their merits, and not by text-books. One can operate earlier if the patient and her friends do not object. Their objections should be overruled if the symptoms are urgent. Speaking for myself, I should advise the patient to forbear the use of an anæsthetic, and, if the os be two-thirds dilated, urge prompt delivery with the forceps. To avoid the shock of delivery completing the exhaustion of the patient it is clear that prompt interference is necessary. Whether the operation be simply to complete an easy labour, or to rescue the mother from prolonged and needless suffering, I think chloroform should be discarded. I shall never forget assisting a powerful gentleman to deliver a monster head with the long forceps. For more than an hour we relieved each other, and at length succeeded with great difficulty, after evacuating the cranial contents. This patient had no chloroform, and, beyond retention of urine for about a week, showed no untoward symptoms. I recall with horror the days in which I revelled in the use of chloroform through ignorance and inexperience, giving it till consciousness had departed, and then resuming the forceps operation!

I delivered a lady (primipara) not long ago with Barnes's long forceps, and took an hour over the operation. The pains had vanished at the end of twelve hours, and could not be brought back again. At the end of eighteen hours symptoms of exhaustion set in, and, although the os was only two-thirds dilated, I determined to operate. Now, I may perhaps be criticised for adopting this course, but, though very modern practice, I think Dr. Playfair, or somebody else, recommends it. It was easy enough to apply the forceps; anything but easy to extract a head above the average size through a firmly solidified pelvis, an imperfectly dilated os uteri, unprepared passages, and over a stoutly resisting perineum. When the head reached the perineum, much care and great patience were requisite to prevent rupture. The tension being great, the pain was considerable, but the free application of lard to the outside facilitated expansion, and the perineum at length "gave way." When I say "gave way," I do not imply that there was a rupture, or even a rent, for there was neither. With the *long* forceps one has perfect command of the labour, and can counteract the final expulsive efforts of the mother. It is only in natural labour, with strong expulsives, that rupture is possible, if the perineum be not judiciously supported. Of course all that has been said about keeping up uterine contraction applies with double force after an operation, whether it be short and easy or prolonged and difficult. The case related is a fair example of the modern forceps operation, and taking into consideration the extreme sensibility of the patient and the state of the passages, it would be considered a typical case for the exhibition of chloroform. Yet no bad symptoms or untoward hæmorrhage followed its disuse, and beyond the retention of urine for a few days (the result of prolonged pressure), there was nothing to alarm the doctor or endanger the patient's life. She left her bed for a few hours daily at the end of a fortnight.

Leicester.

ON THE TREATMENT OF ACNE BY THE INTERNAL ADMINISTRATION OF SULPHIDE OF CALCIUM.

BY HOWARD CANE, M.D., L.R.C.P. LOND.

FROM the great frequency of occurrence of acne, and from its manifesting itself on the faces of individuals of both sexes, about and for some years subsequent to the period of puberty, when any disfigurement is much thought of, especially, though not alone, by the female sex, any therapeutic agent which promises success in this often intractable skin disease will be welcomed by most practitioners as a real gain. It is for this reason that I have been induced to publish the following cases, that the remedy there prescribed may have a more extended trial than I think it has as yet received. I do not bring the sulphide of calcium forward as a new remedy in the treatment of this disease, for it was recommended some years ago by Dr. Sydney Ringer, but I wish to bring it more prominently into notice as a drug which will often prove of signal service in acne when almost all other means have failed. When I first tried it, I cannot say that I had much faith in its efficacy, and in fact only used it as a *dernier ressort*, because I knew that probably most, if not all, of the remedies commonly recommended for this troublesome affection must have been tried. The success

which I attained in my first case, which was of a most obstinate nature, led me to try it in others, and with an eminently satisfactory result. I may here mention that the patient should be cautioned not to wear metallic ornaments during the treatment, as the sulphuretted hydrogen given off from the lungs and skin forms with the metals a sulphide, and this greatly tarnishes any ornaments that may be worn about the person. I have in all cases employed the sulphide of calcium (in preference to the other sulphides), and it may be combined with a few grains of powered loaf sugar, which I have found to be better than the sugar of milk usually recommended. I have always exhibited it in the form of a powder, and have given directions that the powders should be kept in some nearly air-tight receptacle, such as a wide-mouthed stoppered bottle or a wooden pill-box with a tightly fitting lid, as left exposed to the air the sulphide rapidly deteriorates. This direction is especially necessary to patients living some distance in the country, where it is inconvenient to be constantly sending to the chemist to have the prescription freshly prepared, for to derive permanent benefit from the use of this drug it is necessary that it should be taken perseveringly for some length of time.

CASE 1.—G. R——, a young lady, aged nineteen, has been troubled for the last five years with acne of the most severe kind. When she first came to me her face, especially the forehead, was thickly covered with acne spots in all stages of development, the inflamed and suppurating papules being very numerous. She stated that ever since its first occurrence she had been more or less constantly under treatment, but with the result of the disease becoming worse instead of better; though at times it had seemed to improve, it had invariably relapsed after a few weeks, and become as bad as ever. She stated that she had been to three physicians in London, two of whom are eminent skin physicians. Upon making inquiries into the state of her general health, I found it was excellent in every respect, nor was there any derangement of the menstrual functions, as is so often the case in this affection. The eruption was so thick that she was obliged, when out of doors, always to wear a veil, and it precluded her from entering into society to any extent. She spoke in a very desponding way about it, saying it had been there so long, and she had tried so many different drugs for it, that she was afraid she would never be cured. I encouraged her to hope on still, and, though with but faint hope of success, prescribed the sulphide of calcium, of which I gave at first one-tenth of a grain four times daily, with four grains of powdered loaf-sugar. At the same time I directed her to hold her face over a vessel of very hot water night and morning for some ten minutes or more, and then to rub the parts where the little black-topped comedones were very thick with a towel, after which she was to use as a face powder some precipitated sulphur, which I directed to be coloured with Armenian bole. At the same time I gave minute and careful directions as to diet &c., forbidding pastry and flour puddings of all kinds, all salt meats, together with pork and veal, and all stimulants, and likewise enjoined the frequent use of all green vegetables, especially cabbage, watercress, and salad generally, together with regular out-door walking exercise. At the end of a fortnight I saw her again, and found that there was a slight improvement, but not very marked; there were not many more inflamed papules, and the black-topped comedones were considerably fewer in number. I determined to persevere, and my patient, fancying she was somewhat better, was quite ready to carry out my directions to the letter, as she was most anxious to get rid of her disfigurement. I now ordered one powder to be taken six times daily, and to see me again in a fortnight; otherwise continue as before. At the end of that time I again saw her, and, though there was no very great improvement that I could see, still the patient declared she was better, and that there were not nearly so many fresh spots. I now increased the dose of the sulphide to one-sixth of a grain, six times daily; continue everything else as before, and see me again in a fortnight. This she did, and I could now plainly see that there was a marked improvement. The patient was in excellent spirits about it, and had been most zealous in taking her powders and following out my directions. I now further increased the dose to one-fourth of a grain six times daily, with a very excellent result; in another fortnight to half a grain six times daily; and at the end of another fortnight not only but few new spots appeared, but they were much less inflamed than usual, and the others were rapidly disappearing, and the complexion was much clearer. To take one grain six times daily for another fourteen days. I then saw her again. She had now been taking the sulphide for three months with the very best possible result. From this time the progress was uninterruptedly good. No fresh spots appeared, and she continued to take the sulphide for another two months, gradually decreasing the dose until from taking six grains daily she took only one. When no fresh spots appeared, the black topped comedones were all gone, and the complexion was very much improved, the slight scars left, which were at first red, becoming pink. I need not say that both mother and daughter were delighted, especially the latter, while the former expressed her gratitude in a very substantial form. I saw the patient eight months after, and no fresh spots had appeared, the scars were rapidly fading in colour, and she now never wore a veil, and was able to enter into society with ease and comfort to herself, which hitherto had been impossible.

CASE 2.—J. C——, a young lady twenty years of age, came to me for an eruption of acne on the face which she had had for a year, and which had gradually become worse. There were some very large inflamed papules, and numbers of black-topped comedones. She had had acute rheumatism some years previously, and a somewhat loud mitral systolic murmur was heard at the apex, but from the general state of her health I judged that, though the murmur was loud, the regurgitation of blood was not great. I prescribed the same diet and face powder, and gave the same directions as in Case 1, but gave, to begin with, one-fourth of a grain of the sulphide four times daily, gradually increasing the dose to a grain six times daily. At the end of six weeks she was nearly well, and in another month I saw her again, when she was quite cured. She had taken the sulphide in all two months, gradually diminishing the dose during the last fortnight. This was not so severe a case as the first, but the result was equally good. I may here say that this patient also had been taking various drugs for some months previously, but without any appreciable result.

I have before me notes of fourteen other cases treated in exactly the same way, but which I need not detail, as they are merely repetitions of the two given above. The results in eleven out of these fourteen were perfect, whilst in the remaining three, though great benefit was derived, the cure was not complete. I now always begin with a quarter of a grain four times daily, gradually increasing the dose to one grain six times daily, or according to the progress and severity of the case.

St. Albans.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quam plurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

UNIVERSITY COLLEGE HOSPITAL.

OSTEOMA OF UPPER JAW.

(Under the care of Mr. HEATH.)

G. P——, aged forty-six, a tailor, was treated for dyspepsia by a chemist in the country during the year 1857. He was salivated to such an extent that he applied for relief at King's College Hospital. From this time until July, 1876, he suffered more or less pain in the side of the face. In July, 1876, he had severe neuralgia, and at the same time there was an offensive discharge from the upper jaw on the right side. Two molars were removed to permit of the escape of the discharge. The teeth were not at all diseased, but their fangs were much thickened, and between them there was some portion of the alveolus. There was no enlargement of the antrum. After the removal of the teeth some offensive discharge came away, but ceased in three or four days. Previous to the extraction of the teeth the patient noticed gradual displacement of them, and increase in size of the jaw. After removal, the jaw rapidly increased in size and became very painful.

On admission, he had a fulness on the right side of the face, chiefly over the alveolar border, but not over the antrum. He had two incisors and the canine tooth in the right upper jaw; a flattened depression corresponded to the original position of the molar teeth. The whole alveolar border was much thickened, especially at the posterior part and opposite the canine tooth. The thickening extended inwards just beyond the median line; the mucous membrane covering it was natural. There were no signs of ulceration. This swelling was very hard and inelastic; there was no sense of fluctuation in any part of it. One gland beneath the lower jaw was slightly enlarged. There was some pain at night in the jaw.

On Oct. 3rd, the patient having been put under the influence of chloroform, Mr. Heath sawed off the posterior projecting mass, and then gouged out the interior of the remaining part. Very little blood was lost, and the cavity was stuffed with lint. The removed bone was firm, but cancellous in structure, uniform throughout, except that a few points more compact than the rest were scattered here and there. No fang of tooth was found on gouging out the bone.

Next day the plugs of lint were removed, and injections of Condy's fluid were used. On the 9th the patient was doing well. There was less swelling of the face; the cavity in the bone was filling up. On the 12th he was discharged, free from pain.

THE QUEEN'S HOSPITAL, BIRMINGHAM.

CASE OF AMPUTATION AT THE HIP-JOINT FOR OSTEO-SARCOMA; DEATH.

(Under the care of Mr. WEST.)

ALICE G——, aged sixteen, was admitted on April 23rd, 1878. The family history was good, and there had been no previous illness. About nine months before the patient first noticed a lump on her left thigh about the size of a cricket-ball. There was no pain, tenderness, or redness. The tumour gradually grew to the size of a cocoa-nut. At first there was no pain, but later this was experienced. The foot and leg had never been swollen, and she had had no inconvenience from the tumour. She could not assign any cause for it, and has never had anything done for it.

On admission she was a well-nourished, healthy-looking girl. There was an enlargement, occupying the upper third, of the left thigh, of a globular shape. The limb was everted, and there was a contraction of the tendons of the great and little toes. The skin and muscles of the thigh were perfectly movable over the tumour. The superficial veins were slightly enlarged. On manipulation there was a hard, irregular, and perfectly immovable tumour, extending in front from Poupart's ligament to the junction of the upper and middle thirds of the femur. It apparently sprang from the front of the femur, and moved with all the movements of that bone; no difference could be seen in the two sides on the posterior aspect. There was no impairment of the movements of the femur, no enlargement of the glands in the groin, and no pain on pressure. Pulse, respiration, and temperature were normal. Tongue clean, bowels regular, appetite good. Menses not yet commenced.

The tumour was punctured with a grooved needle in one or two places, but nothing but blood came away.

On May 11th, at 11 o'clock, Mr. West removed the limb at the hip-joint, performing the operation in the following manner:—The patient having at first been anæsthetised by chloroform, then kept insensible by means of ether, an anterior oval skin flap was made, commencing at the summit of the thigh on the inner side, and then carried to a corresponding point on the outer side of the limb. The capsule of the joint was easily exposed when this flap was reflected. The joint was opened freely, the ligamentum teres divided, and the knife then passed behind the head of the bone, and a short oval posterior flap was cut from above downwards. An Esmarch bandage had been applied and the limb elevated above the trunk just before the operation. Hæmorrhage was further prevented by compression of the abdominal aorta by a strong branched tourniquet, controlled by Mr. Gamgee, while Mr. Furneaux Jordan and Mr. Wilders secured the bleeding vessels, immediately they were cut, by sponges promptly applied, and subsequently by catgut ligatures. The amount of blood lost was remarkably small, probably not more than a few ounces, except what was contained in the amputated limb. The carbolic spray was used throughout the operation, a drainage-tube introduced between the flaps, and the stump dressed after Lister's method. The patient rallied imperfectly after she was removed to bed. Beef-tea and brandy enemata were employed, and a subcutaneous injection of morphia administered. Towards 4 P.M. she improved in appearance and in strength, but about 7 great restlessness and jactitation came on, and at 9.30 P.M. she died.

No post-mortem examination was permitted, but on removing the dressings it was found that there had been no hæmorrhage of any consequence between the flaps, and none had come through the antiseptic dressings.

The girl had evidently died from the shock to the nervous system, which so formidable an amputation as that at the hip-joint inevitably induces.

The femur, with the tumour divided so as to show its appearance and connexions, may be seen in the museum of the Royal College of Surgeons, where it is being prepared by the sub-curator, Mr. Alban Doran, for exhibition at the next annual museum. It is a good specimen of osteo-sarcoma, as may be seen by microscopic examination.

The tumour occupied the upper and inner part of the thigh, and was attached by a base 3½ inches long, commencing on a level with the lesser trochanter. On section, the tumour was seen to spring from the periosteum, but at some points the growth had penetrated through the compact tissue, especially at its upper part. The tumour was firm, having a basis of a cancellated texture spreading in various directions throughout it; beyond this framework was a glistening, dense, cartilaginous substance, which could readily be cut with a knife. The tumour was softer in some parts than in others, and contained no cyst or cavity. The outer surface was nodular, presenting bosses which varied in size from that of a pea to that of a walnut, and in consistency from that of healthy gland-tissue to that of dense bone. The nodules nearer the femur were harder than those on the surface. The tumour was so close to the surgical neck, and so intimately connected with the bone on its inner and anterior aspects, that it could not possibly have been removed without the femur being taken away as well. Longitudinal circumference of tumour, 12½ inches; transverse, 10 inches; ditto, without the femur, 8 inches. On section: length, 4½ inches; breadth, 2½ inches. Microscopically, it consists of matrix and cells. The cells vary in size from about the 1-2000th to 1-200th of an inch; are irregular in shape, some containing more than one nucleus; some are arranged in spaces, and others scattered irregularly through the specimen; they do not fibrillate. Matrix is plentiful, and apparently fibrous in character; it contains spaces of various sizes, in which a few cartilage cells are placed.

Remarks by Mr. WEST.—Amputations at the hip-joint are sufficiently rare in civil practice to deserve being placed on record. Otis, in his admirable "Report on Amputations at the Hip-joint in Military Surgery" (Circular No. 7, Washington, 1876), mentions that of 111 cases in civil surgery there were 46 successes and 65 fatal cases, or a mortality of 58·56 per cent.; while of 108 well-authenticated cases of amputation in military surgery there were only 10 recoveries—a mortality of 91·66 per cent. But he proceeds to say that these statistics of civil practice are so flattering that there is a suspicion "that all the unfortunate cases have not been published." In this opinion I entirely coincide, and I publish this case from a feeling that the unsuccessful amputations ought to be reported quite as much as the successful, in order that the experience which all surgeons expect to obtain from statistics may be trustworthy. The record of the case shows that amputation at the hip-joint was the only operation that could have been entertained with a view of relieving the patient, and it was performed at a time when she was in good health, and before the tumour had assumed formidable proportions. Thanks to my colleagues' co-operation, the loss of blood was comparatively slight, much less than one often meets with in amputations of the leg, and nothing untoward happened during the operation. The antero-posterior flap made from without inwards was a novelty to me, but I had to adopt it owing to the tumour being so close to the head of the femur and projecting so much forwards that it would have been difficult, if not impossible, to have passed the knife in the usual way over the front of the bone. The lateral flaps, recommended so strongly by Mr. Bryant, could hardly have been formed for the same reason, the tumour extending very much on

either side of the neck and shaft of the femur. I may add that the capsule of the hip-joint is very readily got at by this method of operation, and so the chief point of difficulty about amputations at the hip-joint at once disappears. Shock was the evident cause of death.

CASHEL UNION HOSPITAL.

OVARIOTOMY; RECOVERY.

(Under the care of Mr. THOMAS LAFFAN.)

M. H——, aged thirty-five years, servant, married, came under care in October, 1875. She looked thin and worn, and stated that on the previous May she began to lose health and to look ill. She vomited frequently before eating, and had periodic pains in the abdomen, but her appetite and sleep were good. Her left leg swelled a little. The menses were normal. She attributed her condition at first to pregnancy, but afterwards to cold and hardship. These symptoms continued until August, 1875, when she became pregnant. From that date she noticed no change in them until May, 1876, when she was delivered, after a natural labour, of a healthy male infant. The women about her then noticed that she seemed as large as ever. The left leg and thigh became very much swollen a month after this, and remained so for nearly two months, when the swelling all but disappeared. Her previous health had been good. Her family, too, with one exception, seemed to be healthy. The single exception was that of a brother of about the same age, who had been under Mr. Laffan's care for spinal abscess, caused by a fall from a scaffold in America. This man had a very scrofulous appearance, and from that fact it was inferred that there was some taint of that diathesis in the family.

On admission the patient had the appearance of a half-starved person far advanced in pregnancy. The skin and extremities presented nothing peculiar. She slept naturally, but complained of a slight occasional headache. Sight and hearing were perfect. Her intelligence and temper presented nothing peculiar. The heart and lungs were sound. There were, however, some slight traces of bronchitis. The pulse was normal, as were also the respiration and temperature. The tongue was natural, the appetite and digestion good, and the bowels regular. The abdomen was immensely increased in size; its walls were not œdematous. There was no retraction of them at any point. The umbilicus was depressed, and though it preserved its normal relation to the ensiform cartilage and pubes, it was slightly nearer to the right than to the left iliac spine. The abdominal walls were not so tense but that they allowed of a certain amount of compression. No crackling or friction could be felt or heard, nor could the outline of any tumour be either felt or seen. On percussion the abdomen was universally dull, and the dulness was not affected by change of posture. On making the patient lie on the left side, for example, and compressing the right lumbar region with one open palm, while the fingers of the other hand were used as a percussor, a dull sound was still elicited; while, if at the same moment the opposite flank was also percussed, the patient being placed well out on the edge of the bed, a similar result was obtained. When the patient was made to lie upon the right side, the left flank being uppermost, the respective percussion tones remained unchanged. There was therefore entirely wanting the help which percussion usually affords to differentiate between ascites and ovarian dropsy. Examination by rectum and by vagina afforded no assistance beyond showing that the uterus was healthy. The urine was of normal quantity, specific gravity, and composition, and there never had been any history of urinary troubles. She never had vomited blood nor voided it per anum. She had never had jaundice. There was no enlargement of the spleen. One extremity only had at any time been œdematous. The area of hepatic dulness was normal above. There was no history of intemperance.

After carefully eliminating disease of liver, spleen, and kidney, and considering all the bearings of the case, the question seemed to narrow itself to a diagnosis between peritoneal disease and ovarian tumour. There had been sharp pain, and the dulness was universal. Cases have been published in which, diagnosis between the two being found impracticable, the patients have been placed upon the table and actually operated on for ovarian disease where nothing but peritonitis existed. It is stated that in such a case certitude in diagnosis is not possible. The pulse and temperature, the healthiness of the chest, the duration of the disease, the absence of traumatic history, and the bulk of the abdomen, were all against peritonitis. There was also the fact of the absence of all tenderness on pressure in the abdomen. Mr. Laffan resolved to tap the patient as an additional aid to diagnosis. This was accordingly done some days after admission, and a large quantity of brownish fluid was withdrawn, quite different from that found either in ascites from organic disease or as the result of peritonitis. This fluid was, unfortunately, not submitted either to the test for paralbumen, or to microscopical examination for those cells which Bennett of Edinburgh, and Drysdale of America, have described as peculiar to ovarian disease. Some have said that neither afforded any reliable aid to diagnosis, but Mr. Spencer Wells speaks somewhat more respectfully in his lectures now publishing of microscopical helps. When all the fluid had drained away there was a large central circle of dulness, the remaining parts of the abdominal walls being natural on percussion. After removal of the fluid a silver sound was passed through the trocar opening into the cyst, the uterus being fixed through its cervix, and a comparison was made of the spaces through which the sound moved when the uterus was so fixed and when it was free. When the uterus was not fixed the sound passed at one moment to the very limit of the left hypochondrium, and at another to the right iliac fossa; but when the uterus was fixed, not more than half the space could be traversed by the sound, showing clearly that some cavity in close connexion with the uterus, and not that of the entire peritoneum, defined its movements. When the sound seemed to traverse the entire abdominal cavity, it was at first thought the case was one of peritoneal effusion, but the curtailment of the limits through which the sound passed when the uterus was fixed satisfactorily proved that there was a circumscribed cavity, and one also whose mobility was not reconcilable with the fixedness which is usually considered as the inseparable attendant upon a circumscribed collection of peritoneal fluid. There was, therefore, evidently ovarian disease. It was, however, resolved to wait and see if tapping would effect a cure. The patient recovered without any bad effects from the tapping, and she soon after left for home. The cyst, however, after some time filled again, and she returned in February, 1876. She was again tapped, two and a half gallons of like fluid being withdrawn. This quantity was somewhat larger than that taken before. She soon after again left in order to make arrangements to return for an operation. She was not again seen until the 31st of January, 1878. Her condition was in no material respect different from that which she presented on her first admission. The various symptoms and signs already detailed remained unaltered. She was placed under the preliminary treatment recommended by Mr. Wells, and, after her general condition had been somewhat improved, arrangements were made for the operation. A spacious ward from which all patients were for some weeks removed, situate in the open country, was fitted up for her exclusive reception. The temperature was regulated by a thermometer, muslin bags of disinfectants were hung on cords through the room, and all necessary precautions were observed.

On March 7th Mr. Laffan proceeded to operate, Drs. Molony, Hourigan, Hefferman, and Mr. O'Dwyer assisting. Bichloride of methylene was administered by Dr. Hourigan, and the various steps of the operation itself were carried out after the usual method. The pedicle was secured by a clamp, and during the entire procedure a shower of thymol spray was constantly maintained over the wound by means of Fletcher's apparatus, which was efficiently worked by Mr. O'Dwyer. There was so little distinction between the uterus and pedicle in colour, feel, &c., that it required a careful examination before the clamp could be safely affixed. The *toilette du péritoine* was very carefully conducted, and every portion of the abdominal cavity into which a drop of fluid might have found its way was carefully cleansed with sponges, held in the hand or fixed to long rods. Very little blood was lost. The anæsthetic reduced the pulse at one time to the frightfully small number of twelve beats. Still nothing could have been more satisfactory than the anæsthesia produced. It caused a great deal of depression.

The operation completed and consciousness restored, the patient was after a brief interval removed to bed. She

rallied very soon, and got on admirably during the remainder of that evening. That night she slept badly. Temperature 101°; pulse 130. No pain, no rigors. Took drinks, which were given at regular intervals in very small quantities. Urine withdrawn by catheter from time to time.

Oct. 2nd.—Vomited twice. No pain, no rigor. Took her drinks. Slept a few hours. Temperature 99°; pulse 130.

3rd.—Temperature: morning, 99°; evening, 99°. Pulse 140. Vomited several times. No pain nor rigor. Took her drinks. No sleep.

4th.—Vomited four times. Slept a little. Temperature: morning, 98°; evening, 100°. Pulse 120. Still free from pain or rigor.

5th.—Temperature: morning, 98°; evening, 97°. Pulse 112. Slept a little by means of morphia. Vomited less. Complained of a little pain in the abdomen. A profuse discharge now set in from the wound.

6th.—Temperature: morning, 96·8°; evening, 97°. Pulse 108. Vomiting less. Discharge from wound considerable. A hardness was now felt in left iliac fossa. Slept during the night, but after morphia, and continued to take her drinks.

7th.—Slept well. Took her drinks. Had one move in bowels. Discharge now became purulent. Temperature: morning, 99°; evening, 99·8°. Pulse 120.

8th.—Slept. No vomiting. Had one motion of bowels. Temperature: morning, 98°; evening, 99°. Pulse: morning, 116; evening, 128.

9th.—Temperature: morning, 99°; evening, 100°. Pulse: morning, 132; evening, 136. State of patient in other respects unchanged.

10th.—Temperature: morning, 98·2°; evening, 99°. Pulse: morning, 116; evening, 112. Other matters as before.

11th.—Slept well. Looked flushed. Temperature 99°; pulse 124. Bowels moved twice.

12th.—Slept well. Temperature 100·8°; pulse 120. Some signs of pneumonia now presented themselves in left lung. Great discharge from wound. Great soreness in iliac fossa. Thirst considerable.

13th.—Pneumonic signs as yesterday. Discharge from wound less. Temperature: morning, 99·6°; evening, 99·2°. Pulse: morning, 128; evening, 136.

14th.—Temperature 99°; pulse 108. Lung signs better.

15th.—Improvement in the general conditions and local affection still more manifest.

16th.—Temperature 99°; pulse 120. Sat up to-day in bed for the first time.

17th.—Slept well as before. Temperature: morning, 99°; evening, 99°. Pulse 116. The discharge from wound had during the last few days become much lessened, and the wound itself showed signs of healing up.

From this date the patient convalesced rapidly. The discharge from the wound grew daily less and less, and finally ceased. Its margins coalesced or were joined together by new tissue. Her strength and appetite returned, while the pulse and temperature became natural, and all the bodily functions were well performed. Some pneumonic signs indeed there were for some weeks, but these disappeared in due time; and towards the end of April the patient was restored to perfect health. She was, however, kept in hospital until the 1st of June, as her circumstances were poor, and it was feared to expose her too soon to the perils of a cheerless home.

Remarks by Mr. LAFFAN.—A minute detail of the treatment seems scarcely necessary. Suffice it that symptoms were met as they arose, and that every aid that good air and good nursing could afford was at the disposal of the patient. The stomach sickness, freedom from peritonitis, secondary pneumonia, and free suppuration from stump, notwithstanding antiseptics, constitute the principal points for noting in the after-history of the case. The difficulties which surrounded the diagnosis are interesting, and there is some reason to believe that these difficulties are not entirely exceptional, and that in consequence the disease is not always recognised. Many thanks are due to Mr. Hayes, of Dublin, for many valuable suggestions received during the progress of the case.

THE fifteenth annual meeting of the British Pharmaceutical Conference was held this week at the College of Physicians, Dublin, commencing on Tuesday last, the 13th inst.

PROVINCIAL MEDICAL SOCIETIES.

EDINBURGH MEDICO-CHIRURGICAL SOCIETY.—In addition to the paper read by Dr. Rutherford, at the meeting on June 19th, several cases and specimens of interest were exhibited by Drs. Duncanson, P. H. Watson, and Ronaldson.—At the meeting on July 3rd, Mr. BENJAMIN BELL exhibited a tumour of the eyeball, excised with the globe, from a female patient aged sixty-three, whose sight had been failing for upwards of twelve months.—Professor FRASER showed a specimen of hæmorrhage into the left optic thalamus, left half of pons, and in the ventricle. The man was attacked with apoplexy while at work, and rapidly became completely comatose. The pupils were very much contracted, especially the right; temperature ran up from 100° F. at admission to 105·5° just before death, which took place in seven hours and a half.—Mr. JOHN CHIENE recounted a case in which the operation of nerve-stretching for otherwise incurable sciatica had failed to give relief. The patient, a female aged twenty-eight, had suffered severely for twelve months.—Dr. John Duncan had tried the effect of the introduction of needles into the nerve, and allowed them to remain for an hour and a half without any good result.—Mr. Chiene said he had stretched the nerve on two occasions, on May 29th and June 12th, and yet with no benefit. He also stated that in two of his former cases, in males, the relief obtained by the operation had not lasted, the sciatica returning after twelve months.—Dr. ALEXANDER JAMES then read a paper entitled "The Physics of the Bladder and Ureters." He found that the ureter could bear a dilating pressure of five feet of mercury, and under this it would enlarge to from a quarter to three-eighths of an inch in diameter. In clinical experience the ureter is often found dilated as much as from half an inch to an inch in diameter. As to the bladder, it was found that in the human subject rupture always took place at the neck, owing to the greater strength imparted to the walls by the peritoneal coat. In the sheep, however, the peritoneum did not appear to be so strong, and rupture took place at the base. The experiments were made on human bladders as well as on those of sheep and pigs, and consisted in the introduction of water under varying pressures. It was found that the greater the pressure the less the time and quantity of water required to produce rupture of the bladder, and the less the pressure the longer the time and the greater the quantity of water required. He pointed out that sudden complete obstruction of the urethra in a healthy subject would cause rupture of the bladder from the mere secretion-force of the urine alone, which is equal to from two to four inches of mercury. This force does not suffice to rupture the ureter owing to the small capacity of the latter.—Dr. Wylie did not think spasmodic contraction of the bladder sufficient to cause hydronephrosis.—Dr. Blair Cunyngham related a case of hydronephrosis apparently due to impacted calculus.—Mr. Chiene, Dr. T. A. G. Balfour, and Dr. Keiller also spoke.—Dr. James acknowledged the valuable aid given him by Mr. Scott Long.

BRADFORD MEDICO-CHIRURGICAL SOCIETY (Annual Meeting).—This Society terminated its sixteenth annual session in July, 1878, under the presidency of R. H. Meade, F.R.C.S. The yearly report showed an increase in the number and attendance of the members, in the importance of the papers submitted to the meetings, and the value of the pathological and library departments. The financial report showed a large increase in the funds of the Society. After votes of thanks to the retiring office-bearers, the following gentlemen were elected for the ensuing year:—President: W. Burnie, M.D. Treasurer: W. Whalley, M.D. Secretary: D. Goyder, M.D. Committee: R. H. Meade, H. Meade, J. Dunlop, M.D., and J. Craig, M.D. Curators: T. C. Denby and J. Appleyard, M.B. Auditors: S. C. Hirst and J. Dunlop, M.B.

THE mortality-rate in London declined last week to 24·7, against 27·4 in the week preceding. Of the 1694 deaths, 14 were due to small-pox, 14 to measles, 26 to scarlet fever, 11 to diphtheria, 77 to whooping-cough, 32 to different forms of fever, and 339 to diarrhœa, 269 of these being of infants under one year of age.

Reviews and Notices of Books.

A Case of Complicated Labour, in which Collapse from Post-partum Hæmorrhage was treated successfully by the Subcutaneous Injection of Ether. By A. V. MACAN, M.B., &c. Dublin: John Falconer.—Dr. Macan resorted to the subcutaneous injection of ether in a desperate case of post-partum hæmorrhage with apparently good results, the change being "so sudden and so great that every one in the room was satisfied it was produced by the ether." Almost at the same time he injected perchloride of iron into the uterus, but in the opinion of himself and his colleagues the credit of saving the patient's life must be given to the ether. According to Professor Hecker, who has often used ether subcutaneously, the effect is transitory, and it may be necessary to repeat the injections frequently. The injection is rather painful, but it is believed that it may render transfusion unnecessary. The syringe should be passed deeply enough into the skin of the abdomen or gluteal region, or troublesome abscesses may result.

Placenta Prævia, or Unavoidable Hæmorrhage. By CHARLES BELL, M.D. Edinburgh: Oliver and Boyd. 1878.—Dr. Bell's essay is chiefly historical and critical. He shrewdly discusses the moot points of the subject—e.g., the nature and treatment of placenta prævia, but we can hardly say that his contribution will do much to settle the questions in dispute. It is worth perusal, however, as conveying the reflections of a mature and capable observer on a subject of importance.

Ricerche sulla Innervazione dei Vasi Sanguinei, di LUIGI SEVERINI. Presso E. Loescher. 1878.—This work is divided into five parts: (1) The history of the doctrine of the Innervation of the Bloodvessels. (2) Facts that illustrate the action of Dilatator Nerves on the Capillaries. (3) Researches on the Contractility of the Capillaries which leads to the admission of a Trophic Dilatation. (4) The harmony between Trophic Dilatation of the Capillaries and well-known physiological facts. (5) The harmony that exists between the Trophic Dilatation of the Capillaries and Pathology. Prof. Severini gives the details of some interesting experiments he has made on the action of gases, and particularly of oxygen and carbonic acid, on the capillaries of the membrana nictitans of the frog and on the mesenteric capillaries of mammals. He finds that the action of oxygen is almost immediately rendered apparent by an enlargement, progressively increasing, of the nuclei in the walls of the capillaries, and attaining its maximum in the course of one or two minutes. This is frequently associated with a certain amount of shortening, so that the lumen of the vessels comes to be nearly occluded by them—a condition that is aided by the contraction of the capillary wall itself, as is best seen in parts where there are no nuclei. The action of carbonic acid gas, on the contrary, is to attenuate the nuclei; or if, as sometimes happens, they swell, they project from the outer side of the vessel, the diameter of which is always increased. Professor Severini's views upon the mode in which dilatation of the vessels is effected may best be gathered from his concluding observations, in which he remarks that the idea of dilatation of the capillaries taking place by the action of carbonic acid gas developed in the juices during the excitation of the trophic, secretory, or musculo-motor nerves of the part seems to accord well with the interpretation of the action of these vaso-dilatator nerves, whether regarded from the physiological or from the pathological side—an interpretation which was enunciated in a certain form by Brown-Séquard in his theory of nutritive attraction, and which has been most explicitly propounded by Schiff, where he lays down the maxim that active dilatation appears to be extraneous to the proper tunics of the vessels, and to be effected by the intervascular tissues. Professor Severini, fully agreeing with this, casts a doubt upon the existence of any peripheric nervous centres. The book contains an excellent *résumé* of past work on this interesting subject.

The Moon: her Motions, Aspect, Scenery, and Physical Condition. By RICHARD A. PROCTOR. With two Lunar Photographs and many Illustrations. pp. 314. London: Longmans and Co. 1878.—Few persons are better fitted than Mr. Proctor to write such a book as this. With the requisite astronomical and mathematical knowledge, he employs an easy style of exposition, which only results from thorough familiarity with the subject, and which leads the reader almost without an effort through mazes of figures that would certainly be passed over unread were they not associated with so much collateral information. The distance, the size, the weight, the motions, the aspect of the surface of the moon, the aspect of the lunar beams, the heat, and many other details, are given with remarkable clearness, and the interest is sustained throughout. Mr. Proctor accepts the distance of the moon, on Professor Adams's estimate, at 238,818 miles from the earth; its diameter, speaking roughly, at two-sevenths of the earth's; her surface as 2-27ths; and her volume as 2-99ths. Her total surface is almost exactly equal to the areas of North and South America. The earth's disc, as seen from the moon, is thirteen times and a half larger than she appears to us. The most interesting part of the work is that where Mr. Proctor speaks of the lunar celestial phenomena. The absence of any atmosphere, which seems to be clearly proved by the sudden occultation of stars, will cause stars to be visible day and night, since the lunar sky in the daytime must be perfectly black, except where the sun's corona and the zodiacal light spread a faint light over it, and the general aspect of the sky must be singularly beautiful. Whilst the brightness of the parts illuminated by the sun must be very great, the darkness of the shadow must be correspondingly deep, and there can be no aerial perspective. The discussion on the past history and present condition of the moon's surface is full of interest. Altogether this is a very readable book. The drawings and photographs with which it is enriched are admirably executed.

Mind and Moods: Gossiping Papers on Mind-Management and Morals. By J. MORTIMER-GRANVILLE, M.D., &c. London: Henry Renshaw. 1878.—These papers are "gossiping" only in the sense that they are not systematic and didactic. It would perhaps be more correct to describe them as "peeps" at some of the more interesting localities in the domain of mental and moral science. Under the headings, Thoughtland, Dreamland, Cloudland, Land of Forgetfulness, Spiritland, Will, Self, Work, Rest, and the Burden of Life, the author has contrived in a few pages to inculcate some useful lessons in the physiology and pathology of mind and morals. The papers on Work and Rest have perhaps the most practical interest. Dr. Mortimer-Granville has no sympathy with those who "groan and sweat under a weary life," and who seek an excuse for inaction in the creation of fictitious burdens. On the contrary, he would have us believe that we do too little work rather than too much. The mischief is that what we do we too often do wrongly. Our aims are selfish, and instead of working for work's sake and loving it, we consider only what "will pay." This is a contravention of natural law. "Work," says our author, "is man's mission in the world, and it is Nature's balm or antidote for the sorrows and evils to which he is exposed." Be this as it may, there is no question that if we would preserve a sound mind in a sound body we must "work well, honestly, hopefully, steadily." In conformity with this opinion of the nature and operation of work, Dr. Mortimer-Granville insists that in rest we should seek not "mere cessation from activity," but "relief." Under some

circumstances, and at some times, this would be excellent advice, but to remind us that "the tendency to inaction is the downward dragging to death," is, at this season of the year, simply cruel.

Zeitschrift für Biologie. Von BUHL, PETTENKOFER, and VOIT. Band XIV., Heft II.—This part is occupied with the following papers:—1. On the Excretion of Ammonium Chloride in the Urine of the Dog, by Ludwig Feder. 2. The Chemical Changes in the Water of the River Isar as it flows through Munich, by Dr. Franz Brunner and Dr. Rudolf Emmerich. 3. On the Process of Digestion in the several Segments of the Alimentary Canal of the Sheep, by Professor Wilckens. 4. On the Oxidation of Albumen by the Oxygen of the Air, by Dr. O. Loew. 5. Drinking-water and Cholera, by Max Pettenkofer. 6. The Measurement of the Loudness of Sound, by K. Vierordt.

The Quarterly Journal of Microscopical Science. Edited by Professors LANKESTER, ARCHER, BALFOUR, and KLEIN. No. LXXI. July, 1878. London: J. and A. Churchill.—This number is almost entirely occupied with an account of the embryology of Clepsine, a species of leech, by Charles Otis Whitman, of Boston—a very carefully worked-up article. The second and only other paper is by Dr. E. Klein, who gives the results of his observations on the structure of cells and nuclei.

THE BRITISH MEDICAL ASSOCIATION.

IN concluding the brief outline of the proceedings of the British Medical Association last week at Bath, mention should be made of the Address in Medicine, delivered at the Wednesday meeting by Dr. Goodridge, and notice of which was inadvertently omitted from our columns last week. This was an erudite discourse upon the pathology of fever, the main argument being based upon the researches of Samuel, Buss, and others in regard to the share played by the muscular tissues in the production of body heat. Reference was made to the results of the study of the action of antipyretics, especially creasotate and salicylate of soda, and fever was defined as a pathological modification of the regulation of heat, in which, with increased heat-production, there is relatively diminished heat-discharge, and thus the temperature is raised above the normal standard. The nature of the pyrogenic virus was then discussed, and the view held by some that it is formed in the tissues themselves was ably expounded.

On Thursday morning the report of the Medical Reform Committee was read by Dr. Waters, which commenced by stating that two only of the four grand principles of medical reform with which the Association had started remained unrealised—that of (1) uniformity of examination on the principle of equal fees, and (2) the direct representation of the profession in the General Medical Council. It narrated the events with regard to the Government Medical Bill and its final withdrawal, and expressed a hope that the new phase upon which the question of medical reform had entered would be followed by the Committee.

The address in Surgery was then delivered by Mr. C. G. Wheelhouse, of Leeds, who took for his subject the Progress of Surgery, and passed rapidly in review all the important improvements in that art during the last thirty years. He thus spoke of anæsthetics, of bloodless and of antiseptic surgery, of the employment of aspiration, of the value of gastrotomy, the advances in lithotomy and lithotrity, and of the operation of nerve-suture, of which he related a remarkable case where the sciatic nerve, which had been completely cut across by an accident, and the limb had been paralysed for nine months, was restored sufficiently to enable the patient to follow his occupation, the severed ends of the nerve buried beneath the deep cicatrix being stitched together by fine carbolised catgut. Many other topics were touched upon in the course of his address by Mr. Wheelhouse, who was several times during its delivery loudly applauded.

Then, as reported last week, the special general meeting was held, and, after debate, the new article framed to exclude the female sex from the Association was added.

In the sectional meetings on Thursday afternoon some interesting papers were read; but many were not read that had been sent in, owing to the absence of the authors; whilst, however, others, even where authors had attended the meeting with the especial object of reading papers, did not come off. In the Medicine section, several papers on nervous diseases were presented; one of the foremost being "Notes of a Case of Functional Hemianæsthesia, with Muscular Rigidity," by Dr. Markham Skerritt. The patient, a man about forty years of age, had complete left hemianæsthesia of the body, with spasmodic contraction of the arm and leg, the contraction ceasing during sleep. With the analgesia there was complete ischæmia, as was remarkably evidenced on one occasion when he accidentally cut off the tip of his finger without shedding blood. The patient was shown to the members. Dr. Skerritt demonstrated many of the points. He also stated that metallic applications and faradaism failed to have any influence whatever in restoring the sensibility. The case, as an example of functional anæsthesia, is almost an unique one, considering the age and sex of the patient. Drs. Clifford Allbutt, Althaus, Broadbent, and others discussed the case. Dr. Althaus read a paper on Lateral and Posterior Sclerosis of the Spinal Cord, and in the discussion that followed several members spoke of the significance of the "reflex-tendon" movements, and the value to be assigned to it in diagnosis.—Dr. Beach read notes of cases of Athetosis, and Dr. Gowers on "Syphilitic Neurosis."—In the Surgery section, Mr. Callender delivered his presidential address, taking for his subject the Avoidance of Pain. The proceedings in this section rather languished, as many promised contributors did not put in an appearance.—The chief paper in the Obstetric Section was that by Dr. Marion Sims, upon the operations of Simpson and Sims for Stenosis of the Cervix Uteri. The way in which he arrived at the practice of incision of the posterior lip was admirably sketched out by him.—In the Public Medicine section, Dr. Barlow read a paper on the Isles of Scilly as a health resort, Mr. Burdett described the organisation of home hospitals for paying patients, whilst Dr. Drew, of Sheffield, read a paper on "How far the flesh of diseased animals may be safely used for food," arguing that no flesh except that of animals which die from purulent diseases is dangerous as human food.

On Thursday evening the public dinner was held at the Assembly Rooms, the President (Dr. Falconer) being supported by the Mayor and the Rector of Bath. The proceedings were enthusiastic, about two hundred sitting down to dinner.

On Friday morning the address on Forensic Medicine was delivered by Professor Maclagan, of Edinburgh University, in which he pointed out that the subject was one too much regarded with apathy, seeing that it was the only branch of his work which a medical man might be obliged to practise *nolens volens*. He proceeded to discuss the differences in the criminal procedure in Scotland and England, dwelling especially upon the important advantage accruing to the former country in the institution of the public prosecutor. The office of coroner in England was an anomaly and an anachronism. He was for extending the coroner's office, but if they extended it they gave him the office and power of a stipendiary magistrate. He recommended the adoption in England of the system of private preliminary inquiries in vogue in Scotland.—The concluding meeting of the sections took place immediately after the address. In that of Medicine a paper was read by Dr. Douglas Powell on the resistance of the chest-walls as an aid to inspiration, expiration being entirely effected by the elastic recoil of the lungs. These points of the statics of the chest were illustrated in an ingeniously contrived schema, and their bearing upon morbid conditions was considered. In the same section Dr. Bell read a paper on Wool-sorter's Disease, its relation to splenic fever and other allied diseases; and Dr. Rutherford presented his report on the action of Cholagogues. Several papers were read in the Surgery section, the first being one by Mr. Hutchinson on Certain Relationships between Syphilis and Cancer. The Obstetric Medicine section opened with a paper on "How to Reduce to a Minimum the Midwifery Mortality," by H. A. Allnutt, and one on Infant Mortality by Dr. C. R. Drysdale, these being, as it were, preliminary to the following subject, which had been

previously announced for special discussion: "On Evils, Moral and Physical, likely to follow if practices intended to act as checks of population be not strongly discouraged and condemned." The subject was opened by Dr. Routh, and discussed by Drs. H. Bennet, Marion Sims, and others.

The final general meeting took place on the afternoon of Friday, when a resolution was passed authorising the "Committee of Council to pass a resolution declaring elected all the male persons who were elected by it, or by any Branch Council, during the interval between the incorporation of the Association and the 3rd of August, 1875, but whose election was invalid on account of there being no provision then in existence for the election of members." Reports of the Committee on Restrictive Legislation for Habitual Drunkards, and those of the Parliamentary Bills Committee and the Scientific Grants Committee, were read and received. The regulations for the medal of merit were also accepted, and, after votes of thanks to various officials, the business proceedings of the Bath meeting terminated.

In the afternoon the members were entertained by the Mayor at a garden-party, at his seat at Cranwells, and in the evening large numbers left by special train to attend the *conversazione* and concert given by the members of the Bristol Branch, at Colston's Hall. The Bristol Orpheus Glee Singers charmed the large audience with an exquisite performance, the first piece in the programme being a "Welcome," written by Dr. Swayne. On Saturday numerous excursions were planned to places of interest in the neighbourhood of Bath—e. g., to Sharpness and Berkeley, under the guidance of Drs. Bridgman and Jones; to Bowood and Avebury; to Frome, Longleat, and Sheerwater; to Wells and Cheddar; and to Chepstow and Tintern Abbey.

ABSTRACT OF THREE LECTURES

ON THE POSITIVE IN REMEDIAL ART.

Delivered before the Faculty of Physicians and Surgeons of Glasgow in the Session 1878.

BY B. W. RICHARDSON, M.D., LL.D., F.R.S.

(Continued from p. 64.)

THE practice of medicine in a large number of its branches may be considered as extremely perfect. It is not, certainly, behind any other of the practices in which men of learning are engaged. In many particulars it is conspicuously sounder and more exact than the practice of the legal profession, and far ahead of the political. Indeed, it comes nearer to the practical skill of the engineer than to any other out of the domain of pure and abstract physical learning. A physician who knows the construction of the organism he is called upon to treat, who is fairly versed in its functions, who can trace out the changes to which it is subjected in disease, who can detect its diseases and prognosticate as to the results of them, has a fair share of knowledge that is strictly positive. It is when we come to the question of remedies that the solemn signs of failure in positive knowledge begin. A leading provincial physician brought to London a sick man for consultation. It had been arranged that six physicians should see the sick man independently of each other, and should diagnose and prescribe independently. The case was a clear one and comparatively simple. In diagnosis there was, practically, no real difference of opinion; there was no difference as to the actual character of the disease, and but trifling difference in respect to the extent of the disease. There was no essential difference as to the prognosis; not one of the physicians consulted would have admitted the life of the sick man at an insurance board, and not one proved to be many weeks wrong in estimating the duration of his life. There was a concensus of opinion as to the general mode of life which the patient ought to pursue; and one hand might have drawn out all the reports that were presented on the disease in its pathological aspects. Altogether, in fact, the six minds were as one mind until the all-important subject of use of remedies came into question. To say that now there were not two minds alike is to tell but half the story. The fact is that the prescriptions written were as opposed the one to the other as any kind of opposition could possibly be. If the six prescriptions had been placed in the hands of a physician who knew nothing of the facts of the case, he could not from them have made a guess as to the precise nature of the case. One prescription suggested a mere placebo; a second, what some would call a nervine tonic; a third, an alterative medicine; a fourth, a warm stomachic mixture; a fifth, cod-liver oil and iron; the sixth, an antiphlogistic with a counter-irritant. In perfect bewilderment, the physician who had personal charge of the sick man asked, What should be done? Whose direction should be followed?

And this is the question daily before us all: What shall be done? Upon the answer to that question our fate as a practising profession, in which the people shall have and retain confidence, will soon depend. It is the fact that people care very little for our most positive knowledge of disease unless we can engraft upon it such knowledge of cure as shall lead to removal of disease. "Wherein," say the people, "do you learned men differ from the ignorant quack, if you know and yet cannot do? Perchance the quack may, by doing and not knowing, drop upon something which shall be for our good. Any way, our case being desperate, let us give even the quack's nostrum a trial rather than try nothing at all."

We witness this dilemma constantly, and feel its force. We treat it, however, very differently amongst ourselves. There are some able and learned men amongst us who consider attempt at cure as a hopeless task, and, when it is pursued with enthusiasm, as a kind of quackery or insane superstition. There are others amongst us who retain an honest belief in the use of remedies, and who look upon all the favourable signs occurring in the course of an illness as in some way connected with the treatment pursued. These are very comfortable practitioners, and are, as a rule, the most popular. They carry the people with them in their belief with the easiest and most satisfactory of arguments. I knew one of these for over fifteen years, and I am bound to say I never met a physician who inspired so much confidence. The boldest specimen of the amateur woman-doctor was no match for his precision of statement. "We must clear the *primæ viæ* first, madam; then reduce the fever, and after that we may throw in a tonic with advantage." And, conformably with this design, he proceeded in nearly all cases. If recovery followed, he traced out the *modus* of it, by and from the remedies, with critical exactitude. If death followed, notwithstanding the treatment, he accounted for the difference with the most edifying humility. The treatment was right, "but human skill is not infallible. If it were, man were more than mortal. In this case the will of God was done, against which the wisest are unwise."

Between these schools of thought lie all varieties of shades of faith and of practice; and, out of the doubts which they suggest have sprung the varied schools of so-called dogmatic teaching in which some general dogma has been made to usurp all the principles of treatment, under the direction often of one dogmatist.

A singular illustration of this kind is given in the career of that fine old medical scholar, Michael Albertus, the famous Professor of Medicine in the University of Halle from the year 1710 to 1757. Albertus was the grand essayist or journalist of the time in which he lived. His first dissertation on Hypochondriasis was published in 1703; his last on a kindred subject in 1755. In the fifty-two years he contributed on an average seven dissertations a year, in all 364, in which he discussed almost every subject connected with the progress of medical science.

In the issue of these dissertations Albertus produced three of a therapeutical order which have had the most marked influence on our remedial art. The first of these, "Dissertatio de Curatione per Expectationem," published in 1718, related to that method of cure which has since been known as the expectant method. The second, published in 1731, "Dissertatio de Curatione per Contraria," related to that mode of treatment which has since been called allopathy. The third, "Dissertatio de Curatione per Similia," published in 1734, related to that mode of treatment which has since been styled homœopathy. Some of these methods, since the time of Albertus, have developed, as we know, into systems; the one last named (for allopathy has never been a distinctly recognised system), uplifting itself in the practice of medicine into a distinct schismatic school.

Into systems so conceived men have entered, in competition, with a zeal and indiscretion which, to the scholar who first gave them name, would probably be astounding if he could witness what has occurred from his work. The systems

have suited, by their looseness on the one side, and their dogmatism on the other, all who have been content to accept, that because certain effects have been observed after the administration of certain medicines, or assumed medicinal things, therefore the effects have been produced by the medicinal thing, and the curative power of the assumed remedy has been proved whenever recovery resulted.

By the means thus adopted, of proving the action by the result, we have had prepared for us a series of remedial agents and of formulæ which have passed into use almost without question, and which, even amongst legitimate practitioners of medicine, have been accepted as articles of faith that have scarcely admitted of a doubt. Just a century ago, Edward Fox, the apothecary in ordinary to the Princess Amelia, published an elaborate "Formulæ Medicorum Selectæ; being the Select Prescriptions of the most eminent Physicians for various Diseases incident to the Human Body." In this work the author, with infinite labour, and, I am sure, infinite honesty of purpose, brought together all the choicest receipts on which he could put his hand. The work is dedicated to the distinguished Dr. Warren, F.R.S., Physician in Ordinary to the King, and its worth received universal testimony in its favour. It was the guide-book for treatment in its day, and it stands out as a mark from which the change of treatment that has occurred in a hundred years may be correctly ascertained. From the beginning to the end this book is a dogmatic direction. Not a doubt is expressed on any one of the remedies suggested. The diseases are first named, and then the curative formula is written with as much assurance of its curative value as if doubts did ever sleep. I am bound to say there are many extremely good formulæ in this book, and a man who should follow it now in many of its parts might expect to do considerable curative service. But that which attracts the attention most is the perfect faith of the writer. To his mind the facts of treatment were all known; a man had but to make a correct diagnosis, and lo! the remedy was at hand. Some day, perchance, under the influence of an entire revolution of thought and practice, this assumed position will be the true one. A correct diagnosis will determine a precise treatment, which all men will follow from positive as opposed to mere speculative knowledge. The dogmatic system of Mr. Apothecary Fox, and every other system of a similar character, has, with the progress of science, passed away. The form or letter may remain; the spirit is gone. In place of the confiding spirit which in his day so confidently reigned, and which some of us even in our day have witnessed, we have now that spirit of scepticism which rests on the placebo, and which leads men of the same ability and position to prescribe as if they lived in Babel,—as if, in a matter so vital and so solemn as prescribing for disease they did not understand each other nor wish to occupy common ground.

(To be continued.)

WESTPHAL'S TEST FOR LOCOMOTOR ATAXIA.

To the Editor of THE LANCET.

SIR,—In Dr. Buzzard's lecture on "Some Points in the Diagnosis of Spinal Sclerosis." in THE LANCET of July 27th, it is sought to establish Professor Westphal's test, that of percussion of the ligamentum patellæ, as thoroughly characteristic of locomotor ataxia. In favour of this view, one case is recorded of a typical ataxic nature in which the normal "leg phenomenon" *was absent*, and another "hastily assumed to be one of posterior sclerosis," but afterwards decided not to be such as the "phenomenon" was *present*. Now, since at present I have under my charge in the Stockton-on-Tees Hospital a case unmistakably ataxic in its nature, in which percussion of the ligamentum patellæ gives rises to an upward movement of the foot to the extent of from four to six inches, I think it a suitable one to cite in opposition to the pathognomonic dictum of Drs. Westphal and Buzzard. The fact of the latter gentleman mentioning that any well-marked case of posterior sclerosis which did not embody the *absence* of the "leg phenomenon" in its symptoms would militate considerably against the validity of the sign, is, I take it, an indication that a case in point will be received by him with satisfaction, and, therefore, I venture to detail a few particulars of my patient's history and present symptoms.

J. D——, aged forty-seven, single, engine-fitter, came under my care at the Stockton-on-Tees Hospital on the 26th of July last, with the history that he had enjoyed excellent health until six months before that date, when he began to experience an increasing weakness in his knees, extending up the thighs and down the calves, with aching pains and occasional cramps. Notwithstanding these symptoms he was able to follow his employment till a few days previous to his admission. At this time he felt giddy and generally insecure on his legs, especially when in motion; he also experienced some loss of precision in striking objects with his hammer while at work. He has been a steady, industrious man all his life to within the last four years, during which he has given way to intemperate habits, always drinking ale. His symptoms on admission were those common to locomotor ataxia. Memory and intellect unimpaired, had no pain anywhere, only a sense of aching in his limbs, especially about the knees, loss of precision in striking objects with his right hand, and occasional numbness and tingling in both upper extremities. Locomotion was irregular and jerking, the heels coming to the ground first in a sudden manner. He had difficulty in assuming the erect posture, swaying about constantly, and oftentimes catching hold of the furniture to recover his balance; could stand without tumbling, though with a certain amount of reeling when his eyes were closed. Tingling and numbness of feet were frequent, and coldness of them constant, the whole limbs appearing heavy to him. Percussion of spine indicated nothing, and there was no feeling of abdominal constriction. Circulatory and respiratory systems normal, also the alimentary functions, with the exception of a sluggish condition of the bowels. Had slight incontinence of urine, chiefly after having had alcoholic drink. His eyesight was very good, both optic discs being perfectly normal. There was no diplopia. *The normal "leg-phenomenon" was present to an unmistakable extent.* I would now only add that I employed another test, that of suspending the patient and directing him to move his limbs as in walking. This I did by means of Sayre's apparatus for applying the spinal curvature jacket, and with the result that his knees knocked together, as also did the heels, the feet moving in a semicircular fashion, but not crossing, as they sometimes do.

I remain, Sir, yours, &c.,

W. BEATTIE SMITH,
House-Surgeon Stockton-on-Tees Hospital, and
Dispensary Medical Officer.

August 14th, 1878.

New Inventions.

THE UNIVERSAL INVALID TUBULAR WATER- AND AIR-BED.

MR. J. MILLAR, L.R.C.P. Ed., the physician of Bethnal House Asylum, has designed a bed capable of being distended with air or water, or both. It is made in compartments formed by rolls, or bolsters, some three feet in length, lying across the bedstead and retained in position side to side by a case. The great advantages of this construction are obvious. The bed is capable of being adapted to any pressure by filling each separate tube or bolster to the required degree. Thus the pressure may be taken off a tender part by simply drawing off a little of the water or allowing some of the air to escape. The tubes which lie in the centre of the bed, and are liable to be soiled, can be withdrawn and changed at pleasure, or, for the convenient use of the bed-pan, one or more may be depressed. If the bed is wetted, the fluid gravitates into the interspaces of the bolsters, and the patient is saved from lying in a pool. One or more of the tubes may be kept filled with warm water in special cases with great facility. A glance at the bed will be sufficient to convince any one of its admirable fitness for adoption in general hospitals and asylums. For both medical and surgical purposes it will be of great value. Messrs. Pocock Brothers, of 235, Southwark Bridge-road, London, are the makers.

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THE LANCET.

LONDON: SATURDAY, AUGUST 17, 1878.

THE annual meeting of the British Medical Association has come and gone, and naturally the question arises, How much benefit has been reaped from it, either to the profession or to the public? There have not been wanting local heart-burnings and jealousies, if we may judge from some of the editorial comments in the journals of the city where the Association met; but these, no doubt, must arise, and we hope they are few and of little account. Putting them aside, and glancing at the aims and objects of such a gathering, it is fair and useful to inquire how far these have been fulfilled. In that spirit and in all justice it may be profitable to glance rapidly over the work done, and the pleasure taken, at one of these congresses, which now seem to form an essential feature of modern scientific life.

In point of numbers the gathering at Bath was a small one. The total attendance did not comprise one-twelfth of the list of associates, nor reach to one-third that of the Manchester meeting last year. Nor could it be expected that Bath, as a centre of intellectual activity could compare with the great northern capital; yet, from its situation and pleasant surroundings, it was certainly surprising that so few members of the largest branch of all thought it worth their while to attend. The metropolitan members were almost conspicuous by their absence; they formed indeed but a meagre minority of the whole, and very few of those best known by their activity in the London societies put in an appearance at Bath.

When now we inquire what has been done, we find, in the first place, the presentation of a highly favourable balance-sheet, and a congratulatory report upon the continued progress of the Association. Then there were presented reports of committees on this subject and on that, all more or less self-laudatory, some doubtless with reason, as embodying the results of labours well done, and holding out the promise of future work. These matters, however, need not be dwelt upon. They formed the routine business of the meeting, and were mostly accepted without demur, nay, even with thankfulness, which found expression in the stereotyped resolutions that were moved, seconded, and carried without contradiction, as soon as the report had been read and presented. To be sure, at the first meeting, one member had the effrontery to ask how it was possible for any present to follow the financial details as they were laid before them in the Council's report; but he found no overt support, and his untimely question was promptly suppressed by the rejoinder that such details had been already in his hands for some weeks. Still it must be confessed that his complaint was not unreasonable, and surely if the reports of committees can be distributed at the meeting it would not be out of the way also to distribute copies of the balance-sheet, although it may have been published before. But then, "ways and means" may lead to a desultory and possibly inconvenient discussion. Passing this by, and also the constitutional question to which reference is made in another column, we come to consider the scope and nature of the various addresses and the work of the sectional meetings.

Undoubtedly the opening address of the President was disappointing. Delivered in a large half-filled hall, ill-adapted for oratorical displays (for it was constructed for quite other purposes), and coming upon an audience already subdued by resolutions and reminders of the recent loss sustained by the Association, it would indeed have required all the impassioned force of a practised orator dealing with some lofty topic to have aroused enthusiasm. But both elements were wanting, and it could not consequently be called a success. The opportunity was there, but no advantage was taken of it. Did the address deal with the progress of medicine, or paint in vivid colours the leading features of the healing art? Did it point out the direction in which we should work, or convey any moral at all which could be taken away? Was there one inspiriting notion or elevated thought conveyed in it at all? No; on the contrary—and this may be said without any disrespect to the estimable President, who must have expended much labour on its compilation,—it was composed, firstly, of a glorification of the rise and progress of the Association; and secondly, of a dry and painfully matter-of-fact description of Bath and its excellent natural advantages. To be sure, the occasion was one that could not well be missed. A generation had gone by since a gathering of doctors had taken place in the city of healing waters; nor was it for the first time in the history of the Association that its President has deemed it most fitting his high office to descend to the level of an instructive guide book. And so he dealt out to his audience the arid details of death-rate statistics; and descanted on the water-supply and drainage, and the virtues of the mineral waters of the famed city. No wonder that the ardour of the audience was damped. No wonder that they failed to find anything in such an address to inspire them or cause them to enter on their work with renewed zest, and it must have been with a sense of relief that they found the learned doctor passing over many pages of his laboriously prepared production, and doubtless they were glad when it was all over. It was disappointing, certainly; but the truth is that such has too often been the line taken, and Dr. FALCONER, in taking it, was only treading in the steps of many of his predecessors.

The other addresses were of a different stamp, and each in its way characteristic. That on Medicine, by Dr. GOODRIDGE, was a learned disquisition upon fever—a large subject, and one, if we mistake not, dealt with by Dr. SANDERSON at the London meeting some years ago. It showed great painstaking, great accuracy, and an intimate acquaintance with modern German doctrines, and did not pretend to originality in research. No doubt it served its purpose. But, like the presidential deliverance, although for quite different reasons, it failed to raise enthusiasm or interest. It was too learned. The address on Surgery was of a different character, and far more fitted for exciting interest and compelling attention. In dealing with the surgery of his time, Mr. WHEELHOUSE was quite at home, and he performed his task in a masterly manner, clothing his facts in clear and concise language. He thus travelled over the length and breadth of his art, and may be credited

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with having produced a very vivid conception of the scientific surgery of the present. The third address, by Dr. MACLAGAN, upon Forensic Medicine, was bold and vigorous, and was delivered with considerable force, not unmingled with humorous satire, as he showed up the weak points of English medical jurisprudence, and contrasted the modes of legal inquiry into the causes of death prevalent in this country with those of Scotland, and, as may be expected, greatly to the advantage of the latter.

The work done at the sectional meetings was remarkably barren. The depth of barrenness was reached in the Physiological Section, which, beyond one short session of a few hours, had literally nothing to do. Is this to be laid at the door of the Act of last session, or is it not rather that the physiologists find a more congenial atmosphere among the philosophers of the British Association? The greatest amount of activity, however, was shown in the section of Medicine, where some really good papers were read, and the chief gain of the meeting was undoubtedly in the discussion upon the diagnosis and treatment of intestinal obstruction, so well opened by Mr. HUTCHINSON. It served to bring out several discordant opinions—e.g., Mr. HUTCHINSON deprecated, or rather discountenanced, exploratory abdominal section in obscure cases, but this view was not shared by some who spoke; his avoidance of opium and his dislike to acupuncture also met with contrary views, but his suggestive "memoranda" and the important remarks with which he prefaced his paper, pointing out the various affections which may be mistaken for obstruction, will bear fruit. The afternoon's work thus inaugurated was one of the best spent of any during the whole meeting. Other communications of considerable value were made to this section. Dr. SKERRETT'S unique case of Functional Hemianæsthesia with Muscular Rigidity in a Male Adult, Dr. RUTHERFORD'S report on the Action of Cholagogues, that of Dr. GOWERS on the Pathology of Hydrophobia and Rabies, and Dr. DOUGLAS POWELL'S demonstration of the Elasticity of the Lungs and Chest-wall, not to mention others, were certainly features of the meeting. In the Surgery section there was less activity, an interesting discussion upon Hip-joint Disease, arising out of papers by Dr. MACNAUGHTON JONES and Mr. OWEN, being the most notable. The public were supposed to be freely admitted into the section on Public Medicine, but few could have availed themselves of the privilege, for although many and various subjects of hygiene were discussed, the audiences were mostly meagre in the extreme. It was reserved, however, for the Obstetric section to exceed the limits almost of professional propriety. A subject of which we have all heard far too much of late, which has been discussed with a licence in the public press that has caused men to think whether we are really living in the age of boasted enlightenment that we are always asserting we are, which from under the cloak of Malthusianism has been dragged to light and flaunted before the eyes of all—this matter was thought to be fit matter for sober scientific discussion. We make bold to say that its introduction was both unnecessary and uncalled for. Surely it was unnecessary, for there can be no medical man worthy the name who can ever approve of measures which the opener of the discussion so strongly condemned. And it was uncalled for, seeing that the moral evils of such practices must be patent to all, and the physical evils are not different from those accruing from other causes. In brief, all English practitioners are, we hope, of one mind on the question which was here raised, and being of one mind, there was surely no scope for discussion and no real justification for introducing so painful and disgusting a topic. We must hold that the Council were to blame for sanctioning so useless a proceeding, for it served no good purpose, either in the interest of science or in that of morals.

As a whole, the scientific results of the meeting were small, smaller than usual; but although this its ostensible object was not very successful, the same cannot be said of that portion of the time that was devoted to pleasure. The hospitality and good-will of the people of Bath and Bristol were admirably shown, and no doubt fully appreciated. The Corporation allowed members of the Association free use of the baths and pump-rooms, and doubtless this gracious act will be repaid in a material increase to the city in patients sent to the hot springs. The Mayor of Bath deserves great credit for the part he played in organising the *soirée* on Wednesday evening, and the garden party at his beautiful seat at Cranwells on Friday. The dinner met with the usual success. But the crowning feature of all was the admirable reception given to the Association by the Bath and Bristol Branch, in the *conversazione* and concert at Colston's Hall. None who were present are likely soon to forget the singing of the Bristol Orpheus glee-singers, which was the great success of the evening. Had a like zeal been shown in the scientific as in the social elements, then indeed the meeting would have deserved fuller praise than can justly be accorded to it.

THE Diaphragm is a muscle the functions of which are of such importance that it is a matter of some surprise that so little attention has been paid to its diseases. With the single exception of the heart, no muscular structure of the body is in such constant action, and no muscle has so great influence on the functions of important viscera. And yet until now very few observations have been made upon its morbid states, and the student will search in vain for any important facts regarding its diseases, with the exception of a few valuable and suggestive observations recorded in our columns some ten years ago by Mr. CALLENDER. In the last number of VIRCHOW'S *Archiv*, however, is an account of some observations by Professor ZAHN, of Genth, which show how frequently it is found diseased, how various are the morbid changes it presents, and which suggest very strongly that their influence may often be in a high degree prejudicial. It was, indeed, the observation of some cases in which slight bronchitis and emphysema, with congestion of organs, and simple, moderate dilatation of the right ventricle, seemed insufficient to account for death, but in which marked degeneration of the diaphragm coexisted, which led ZAHN to study the condition of the diaphragm in other cases.

The result was the discovery that a degenerated state of the muscular fibres is by no means infrequent. The changes observed were of several kinds—simple brown atrophy, with proliferation of cells and nuclei, and granular clouding, with fatty and vitreous degeneration of the fibres.

The former appears to be the more frequent, although the least important. It is not easily recognised with the naked eye, the muscular tissue appearing merely thinner than normal, and somewhat pale. The peritoneum covering it, when stripped off, has a brown colour, and between the muscular fasciculi collections of fat exist. The microscope reveals greatly degenerated fibres, lying among others nearly normal. The former have lost their striation, and contain many granules and spherules, much less numerous than those which characterise fatty degeneration, and the smaller disappearing under acids. About the nuclei are accumulations of yellowish granular pigment, sometimes separating proliferated nuclei. A peculiar protoplasm-like substance sometimes surrounds the nuclei, or lies in the muscular fibres, giving them a peculiar appearance, and in places occupying peculiar lateral bulgings of the wall, and these containing numerous nuclei. These bulgings may be so numerous as to be in contact. The proper tissue of the fibres so affected is always more or less degenerated. During two months ZAHN met with no less than twenty cases in which this brown atrophy of the diaphragm was more or less marked. Almost all of the individuals presenting it were over fifty years of age; all were considerably emaciated; in most, other organs presented also simple atrophy; and in all the muscular substance of the heart presented distinct brown atrophy. The cause of death in most was senile emphysema and bronchitis, catarrhal pneumonia, or some tubercular disease of the intestine; in one cancer of the œsophagus. In all some causes had produced a state of chronic marasmus. ZAHN conjectures that the condition of the fibres may have arisen from a degeneration of the contractile element and an imperfect attempt at restorative growth in the cells of the muscle.

The granular and fatty degeneration of the diaphragm gives it, as seen through the peritoneum, a pale and somewhat opaque appearance, and when intense, minute yellowish spots may be seen among the muscular bundles. Microscopical examination shows that the degeneration affects almost all the fibres, and presents its usual appearance, the change in different fibres being, however, far from uniform. In some the granules are very fine and closely set. The muscle-cells present no proliferation in young persons, but in the old the fatty degeneration may be accompanied by cell-proliferation, with or without a deposit of pigment. Protoplasm surrounding the nuclei is, however, in this case crammed with fat-globules. This change ZAHN found twice in nine cases, each individual being over eighty years of age. CALLENDER recorded[1] six cases of fatty degeneration found in subjects of various ages. In all it was associated with marked fatty degeneration of the heart, while the other voluntary muscles were healthy. To these cases ZAHN adds nine others, five over fifty, and four under forty. All presented the traces of more or less bronchitis and emphysema, and some, croupous pneumonia. In the latter cases there was no fatty degeneration of the heart, but in all the others the heart and the diaphragm presented the same change. Putting together CALLENDER'S and ZAHN'S cases, we have ten men and five women, and thus the affection appears to be more frequent in the male sex.

[1] THE LANCET, 1867.

The third form of change—the waxy or vitreous degeneration of the fibres—ZAHN has found in one case only, a middle-aged man who suffered from chronic alcoholism, and died of pneumonia. To the naked eye, the diaphragm was normal, but under the microscope many fibres presented the change in its most characteristic form, while others were in a state of commencing fatty degeneration. No similar degenerations could be found in the heart or other muscles, but the liver was fatty.

The correlation of these changes with clinical symptoms has yet, in a great measure, to be made. One of the most important clinical facts is the great frequency with which degenerations of the diaphragm and of the heart coincide. The changes in the two muscles are similar in character, and occur for the most part at a time when muscular tissue elsewhere in the body is normal. The two structures have certain common physiological conditions. From birth to death they are in almost uninterrupted work, and each appears to suffer at the same time from the same general cause; and it may well be that the increased work which chronic bronchitis and emphysema throw upon the diaphragm and heart may lead, in some cases, to the occurrence of the simultaneous degeneration of the two structures, since in the heart the change is found most intense in that portion of the heart on which the greatest work falls—the right side. An explanation of the origin of the degeneration in acute lung diseases, in which commonly the heart is unaffected, is less obvious. All the conditions of muscular over-action tend, however, to produce hypertrophy, as well as, and even more than, degeneration. Whether in these cases the muscular tissue of the diaphragm is increased in quantity is a question that must be left for the present uncertain. The symptoms and consequences to which the degenerations give rise must also be ascertained by further observation. In many of the cases intense dyspnœa had existed during life, but there were in all other conditions to which this symptom might be, in part at least, ascribed. VIRCHOW long ago pointed out that atrophy of the diaphragm increases greatly the effect of asphyxiating causes, and may determine the fatality of the least bronchial catarrh. Whether, however, we may suggest, this is true in cases in which the diaphragm alone is affected, the intercostals being normal, is a point on which further observation is necessary, and on which the phenomena of some cases of paralysis of the diaphragm throw some doubt. The point suggests, however, the desirability of a more careful examination than hitherto has been made into the condition of the intercostal muscles in other cases. This is also important as regards the question of pathogenesis, since, if overwork plays a potent part in the production of the change, the intercostals should suffer in due proportion in the same cases.

AGAIN "the woman question," in relation to the practice of physic and surgery, is forced upon us by the wise decision of the British Medical Association to exclude female practitioners; and, by a curious coincidence, we are, at the same moment, invited, by an able article in the last number of the *Spectator*, to consider the peculiar physical state and mental susceptibilities of "Invalids." The two topics, thrown together, not inopportunely, suggest the comparison, or contrast, as it will be found, of woman as doctor and woman as

nurse. In the one character she is as awkward, unfit, and untrustworthy, as she is at home, capable, and thoroughly worthy of confidence in the other.

Setting aside the anomalies and, as we believe, the gracelessness, of the position which a well-meaning but misguided young woman assumes when she undertakes the practical study of medicine, and waiving the question of feminine personal and social disabilities for the vocation of physician or surgeon, there is the all-important issue of natural and constitutional fitness. In the economy of nature—whether expounded by the Oracular utterance, or evolved by experience—the ministry of woman is one of help and sympathy. The essential principle, the key-note of her work in the world, is *aid;* to sustain, succour, revive, and even sometimes shelter, man in the struggle and duty of life, is her peculiar function. The moment she affects the first or leading *rôle* in any vocation she is out of place, and the secondary, but essential, part of helpmate cannot be filled. A more womanly sister may nominally assume the position of *help*, but, however willing, she cannot sustain the part, because the lead is out of natural concord, and harmony is impossible.

This is not a mere sentimental view of the facts. If women undertake the duties of physicians and surgeons, we shall presently feel the want of nurses. It is opposed to the genius of woman's nature to act as helpmate to her own sex. Men may tend men, and women women, in sickness, but, except in cases where the ties of blood or friendship hold nurse and patient together in sympathy, the service rendered is that of the "hospital orderly," a thing to be tolerated in the absence of something better, rather than valued for its intrinsic fitness and excellence. The heartlessness of such a ministry will be still colder and less genial when all that pertains to the harmony of woman as nurse acting as the helpmeet of man as doctor in the sick room is sacrificed. The superiority asserted and the deference claimed by the woman doctor will not be readily conceded by her less favoured but not less ambitious sister. The unsuitability of men as nurses is not due to any want of power or tact on their part; they are stronger, and, therefore, able to perform many services for the sick with less fatigue to the patient than women-nurses, and when feeling and interest inspire the touch of a man's hand, it is steadier, more precise, and not less gentle than that of a woman; but, unless under exceptional circumstances, man's nature rebels against the complete surrender of his own judgment and that implicit obedience in spirit, as well as letter, which are the first essentials of a good nurse. In the same way women will, unconsciously, perhaps, but effectually, cease to play the subordinate part required of them as nurses when their own sex is elevated to the control of the sick chamber and the treatment of disease. Already, since the craze of women to become physicians and surgeons has attained proportions promising success to the movement, we recognise an evil influence on the training and work of female nurses. Subjects of purely medical and surgical concern are beginning to be included in the "studies" of the *nurse*, while other matters, on which mainly the success of treatment must always depend, are regarded as menial, and relegated to the care of servants told off to wait on the "skilled." This is a small but significant sign of the condition of matters to which the "woman-doctor" movement is progressing. In the end there will be no nurses, because the female sick-tenders will not yield docile obedience to their feminine medical superiors, and because the craft of "skilled nurse" will be so developed that it must jostle the profession of woman-physicians. Ultimately the evil will probably cure itself; the women-doctors will find it necessary to nurse their own patients, and in the school of experience they will at length become convinced that this ministry is their personal and best vocation, which no intruder can occupy, because none save themselves can fulfil.

The needs of the sick are in part physical, and in part mental, and so far as the constant and immediate associations of the sick chamber are concerned, they are all of a nature which women alone can effectively satisfy. It is woman's prerogative to nurse, whether the helpless being at her mercy be an infant, or an adult reduced to the level of childhood by disease. Women cannot desert the position of nurses of the sick unless they also abandon the rearing and tending of the young. The sympathies and graces called out by the one function are those which must be enlisted in the service of the other. It is our contention that by becoming doctors women virtually, and—so far as the vast influence always exerted by strong-minded individuals on their order is concerned—in a representative sense, cease to be nurses. The influence will, in this case, be, and is in truth becoming, especially disastrous socially, because the omen of the movement is held to mark an advance of the sex to higher ground, and this only too certainly implies the contemptuous abandonment of every sphere of action conceived to be less elevated. There is only one natural safeguard as regards the spread of this revolt against the reign of natural law. Confidence in man is an integral part of the instinct which has constituted woman his helpmeet in life, and however exceptional women may disport themselves in the new sphere unwisely, as we believe, thrown open to them, the great body of sensible females must, in the more critical moments of peril from sickness, whether in their own cases, or those of persons dear to them, recur to the counsel of their natural leaders. We have no misgiving as to the ultimate issue of this weak exploit. There will probably be always a few "women doctors" for those of their own sex who care to seek their services; but for the aid of the many, and in the more serious maladies, the services of the profession will be required. We say "the profession" advisedly. The law may recognise the qualifications obtained by women, but the profession must, in self-respect, and we will not scruple to add in common decency, decline to accept them as titles of admission to the general body of practitioners. The confraternity of physicians and surgeons will not, we apprehend, either consult or hold professional intercourse with those who have assumed a position, and now desire to exercise functions, opposed to the instincts of their sex. We do not fail to appreciate the intellectual ability and industry displayed by the women who are devoting their time and talents to this enterprise, albeit their advocacy is not characterised by modesty; but we believe the effort to be misdirected, and the strength of brain and body expended for naught. This exploit is on a par with the triumph won by a genius who succeeds in so cheating the senses as to seem to reverse the laws of nature. The feat is a "sensation," and the

recompense will be appropriate, but not permanent; least of all will it issue in a reversal of the decree by which woman was given to man to be a helpmeet. Woman as a nurse is the natural help of man as a doctor. Woman as a doctor is a conceit contradictory to nature, and doomed to end in disappointment to both the physician and the sick.

BY a provision of the Contagious Diseases (Animals) Act, a long-desired amendment of the sanitary law has, we believe, been erroneously supposed to be accomplished. Under Section 33 of the Bill which has become law (and of which the provisions will come into force on the 30th of September next), it is provided that the Privy Council may from time to time make such general or special orders as they think fit, subject and according to the provisions of the Act, for the following purposes, or any of them—namely: for the registration with the local authority of all persons carrying on the trade of cowkeepers, dairymen, or purveyors of milk; for the inspection of cattle in dairies, and for prescribing and regulating the lighting, ventilation, cleansing, drainage, and water-supply of dairies and cowsheds in the occupation of persons following the trade of cowkeepers or dairymen; for securing the cleanliness of milk-stores, milk-shops, and of milk-vessels used for containing milk for sale by such persons; for prescribing precautions to be taken for protecting milk against infection or contamination; and for authorising a local authority to make regulations for the purposes aforesaid, or any of them, subject to such conditions (if any) as the Privy Council may prescribe.

At the first blush it may have appeared that the public obtained, by a sort of legislative side-wind, what medico-sanitary workers have so long sought in respect to dairy-farms and dairies; but a closer consideration of the new Act corrects the misapprehension. First, the "local authority" referred to does *not* include sanitary authorities, as such, except they chance to be municipal corporations, the Local Board of Oxford also excepted. Indeed, the local authorities for the purposes of the Act are the justices in general or quarter sessions assembled, the Corporation of London, the Metropolitan Board of Works, municipal corporations, and the Local Board of Oxford. Thus, in so far as any public health aspect of Section 33 of the Act is concerned, two entirely new sanitary or *quasi*-sanitary authorities would be created, having no organisation which would enable them to deal in any just sense with that aspect of the question. Moreover, the inspection contemplated is a *veterinary* inspection, not a *medical*, unless the Privy Council were advised that they may interpret the words of the section in a wider sense than appears on the face of it, an anticipation not to be entertained.

It must not, therefore, be assumed that in the above provision we have got what medico-sanitary workers have wanted, or that the provision will give such control over the dissemination of disease by infected or polluted milk as is needed. We even fear that the provision, from the place where it is found and in relation to the rest of the Act, will have the effect of nullifying the medical aspect which is essential to a right view of the question. The mode in which the provision passed through Parliament, almost unchallenged, suggests a like conclusion. The Privy Council, deprived of its medical officer, its medical department, and of its general sanitary functions, is not the body to be charged with the public health aspect of the question, and the Local Government Board, which is so charged, does not appear in it.

Annotations.

"Ne quid nimis."

CYPRUS.

IN reply to a question by Mr. Monk, in respect to the sanitary condition of Cyprus and the health of Her Majesty's troops in that island, Colonel Stanley, on Wednesday last, stated "that the last official information on the subject had been received by telegram from Sir Garnet Wolseley two days ago, when he reported that there was no serious illness among the troops in Cyprus. He had also received a private letter from that officer to-day (the 14th), in which it was stated that the health of the troops continued excellent. The medical report, which he had likewise received to-day, was to the same effect. On the whole, therefore, there was no cause for anxiety on this head." Nevertheless, we agree with the special correspondent of the *Daily News*, who writes, "The first work must be that of sanitation." According to this authority, water is good and plentiful in the neighbourhood of Nikosia, which possesses many wells, and an aqueduct by which a constant supply is brought from the mountains. The *United Service Gazette* details the preliminary arrangements made immediately after the occupation of the island, from which it appears that a body of some fifty marines were sent from Larnaka to Nikosia, a distance of twenty-five miles, that the mules declined to accept the heavy burdens assigned to them, that the men were compelled to walk, and that, as a practical but very unpleasant result, 25 per cent. of the small number "were knocked down by sunstroke; their exhaustion is described as extreme." And all this occurred because no mule-drivers were sent with the small detachment, and because they should have started several hours earlier, so as to have avoided the midday heat. Although the "big gooseberry" season has just commenced, we do not desire to sensationalise Cyprus in any way, or to heap reproach on those who were called upon to administer locomotive arrangements at almost a moment's notice. But, having regard to the fact that men and money are on these occasions always supplied without stint, it seems too bad that such events should so often occur. Why was not a senior medical officer sent from Malta with the commissariat staff to assist in choosing the camping ground, and to report to the commissioner generally on matters relating to health?

SUMMER DIARRHŒA IN LEICESTER.

IF the interesting problem of the peculiar and persistent prevalence of summer diarrhœa in Leicester has not hitherto been solved, this has not arisen from any lack of local effort to get to the bottom of the question by the sanitary authority of the borough. We have now before us another attempt to throw light upon the vexed matter, made by Dr. William Johnston, F.G.S., the assistant medical officer of health, in a report on the principal zymotic diseases prevalent in the borough in 1877. This report has a special interest because it seeks to prove that the excess of prevalence of diarrhœa in Leicester is dependent upon the condition most commonly accepted as determining local excesses of the malady—namely, excremental pollution of air and soil. Previous investigators have concurred in setting aside such pollution as having any conspicuous part in, or in fact in any way determining, the excess, and they

have suggested as the conditions of prevalence, separately or combined, the direct local effects of solar heat, certain maternal neglects, and a water-logged subsoil. Now Dr. Johnston's investigations go to demonstrate that the superficial cleanliness of the borough as to excremental matters has been too readily taken as an actual cleanliness, and that sources of excremental pollution of air and soil exist therein which have not received the attention they deserve, and which have distinct topographical relations with the prevalence of diarrhœa in particular localities of the borough. He endeavours to prove, in fact, that in certain districts of Leicester, where the sewers are not self-cleansing, these sewers are apt to become, and in fact are, partially filled with a débris of road-washings, cemented, so to speak, by sewage; that the operation of the sewers is thus disturbed, much putrefaction of the sewage matters going on within them, and much leakage taking place from them. Hence a large diffusion of sewer-air from the sewers into houses, and in their neighbourhood, and a considerable and increasing fouling of the subsoil with sewage in the vicinity of houses. He then proceeds to point out that the distribution of the summer diarrhœa corresponds more or less with that of faulty sewers of the kind described; and that the chief incidence of the disease is observed in those localities where, from an aggravation of structural defects in the sewers, the subsoil is most polluted with sewage matters, and the atmosphere most vitiated by the escape of gases generated within the sewers. He further seeks to prove that a marked correspondence is found between the distribution of summer diarrhœa in the borough and the distribution of typhoid, and he advances the opinion that the majority of the cases of infantile diarrhœa there are but forms of typhoid fever, rendered irregular in their course and fatality by the depression of temperature and symptoms of extreme collapse that are induced by the profuse choleraic discharges met with in children affected with the former disease. Reviewing the whole question, Dr. Johnston assigns the excess of summer diarrhœa in Leicester to the "solar heat" acting upon a system of drainage insufficient for the requirements of the town, badly constructed in parts, defective as to ventilation, not self-cleansing, retaining within the drains and sewers on the lower levels much foul matter, and more or less leaky. In other words, his investigations would bring the question of the prevalence of summer diarrhœa in Leicester within the more commonly received notions as to the conditions determining local excesses of the disease.

Dr. Johnston's results have not been accepted unreservedly by the sanitary authority, but it is clear that they call for further investigation of the subject with a view to their confirmation or otherwise. Having regard to the special etiological interest which attaches to the local prevalence of summer diarrhœa in Leicester, would not the sanitary authority do well to ask for an independent investigation by one of the medical inspectors of the Local Government Board?

ROYAL COLLEGE OF SURGEONS IN IRELAND.

ON Saturday last the new buildings which have been lately added to the College were formally opened by the Duke of Marlborough. They consist principally of additions to the museum and library, and have cost about £8000. The President, Mr. Smyly, in his address remarked, in reference to the Medical Bill lately before Parliament, that the College had given every assistance in their power to pass it, as they considered it in many ways a most valuable measure, and that the Government had adopted nearly all the recommendations in the amendments they had accepted before the Bill was withdrawn. In alluding to the admission of ladies to the profession he observed that the College were at present considering the advisability of admitting them to their diplomas in the same way as the College of Physicians had done. His Grace, in reply, spoke of the great benefits which the College had already conferred, and was still conferring, on this and other countries, and referred to the illustrious men—Cusack, Carmichael, Crampton, Colles, and others—who had shed lustre on the institution, and on the degrees which it had bestowed. He believed that the recent legislation towards obtaining an improved system of examination for medical students, although not perfected, had laid down the principles of future legislation, which he trusted would be of the greatest possible benefit to the medical profession. We may add that the foundation stone of these additions to the institution was laid by the Duke of Abercorn in 1876.

A *conversazione* will be held at the College on Monday evening, the 19th inst., during the visit of the British Science Association to Dublin.

THE ORIGIN OF MILIARY ANEURISMS.

THE researches of Bouchard and others on the occurrence of miliary aneurisms in a large number of cases of cerebral hæmorrhage have been amply confirmed. The cases in which the condition has not been discovered have been, for the most part, cases in which the hæmorrhage was secondary to chronic renal disease. An interesting study of the pathogenesis of the condition, by Dr. Eichler, of Kiel, appears in the last number of the *Deutsches Archiv für Klinische Medecin*, and is based on an examination of three or four hundred specimens. He has studied especially the early stages of the process. The first alteration is a multiplication and fatty degeneration of the endothelium of the vessel, and a notable thickening of the homogeneous layer of the intima which limits the endothelium on the outer side. All portions of the vascular wall take part in the commencing dilatation. The external coat is quite unchanged, and is separated from the muscular coat by a lymph-space which Eichler, following Axel Key and Retzius, believes to exist in that situation. All authors, with the exception of Roth, have described the muscular coat as early disappearing and becoming atrophied, and consider that the atrophy of this coat really conditions the aneurism. Eichler, however, not only found it well preserved in young aneurisms, but even in older ones its traces could be distinctly observed. The muscular tissue is, however, slightly changed, even in the earliest stages. The individual fibres do not, it is well known, form complete rings around the vessel, but extend through only part of the circumference and interdigitate to some extent. This arrangement is disturbed in the commencing aneurism. No fatty degeneration could be discovered in the fibres. The thickening of the intima is so considerable that it forms a prominence within the vessel, sometimes homogeneous, sometimes laminated. On the inner surface it is covered with the thickened endothelium, and often by a layer of white blood-corpuscles, frequently degenerated. Sometimes the endothelium appears to degenerate and peel off into the lumen of the vessel. The outer and middle coats of the vessel are always normal in the young aneurisms, and hence it appears that these are due to the change in the inner coat. This is confirmed by the fact that where this change is partial, and affects only one part of the wall, that part only becomes bulged into the aneurism; whereas, when the change surrounds the vessel, the dilatation has a corresponding extent, and a fusiform aneurism results, and if the change is more marked on one side of the vessel than the other, the bulging is greater on that side.

The second stage of the aneurism is characterised by an enormous overgrowth of the intima, a gradual atrophy of the muscular coat, and a process of growth between this and

the outer coat. The thickened intima presents lamination, and between the lamellæ are indications of groups of degenerated cells. Finally, a yellow homogeneous plate is produced, on which the endothelial covering can no longer be seen. The thickening of the intima is often inconspicuous, in consequence of the great dilatation and stretching of the wall which coincides with it, but sometimes it may be so great as to actually narrow the lumen of the vessel at part of the diseased spot, the other part being bulged. The atrophy of the muscular coat appears to depend upon the bulging of the vessel, but it is rarely so complete that traces of the muscular fibres cannot be seen towards the extremities of the aneurism. The external presents the least change. Only where a vessel enters the aneurism is there obvious thickening of the outer layer, which Eichler believes to be due to the accumulation of lymph-cells in the lymphatic space which he and Axel Key consider to exist between the external and middle coats of the vessel. The thickened intima may undergo calcification or, more frequently, fatty degeneration.

This description is, it will be seen, in effect, that of chronic endarteritis, and it follows from these observations that the aneurisms result from the common senile change. They are true aneurisms, involving the whole of the walls of the vessel, and have to be carefully distinguished from the so-called dissecting aneurisms of the same vessels, which are consequences, not causes, of cerebral hæmorrhage.

THE GLOUCESTERSHIRE COMBINED SANITARY DISTRICTS.

THE report of the medical officer of health of this district (Dr. Francis T. Bond) for 1877 is of peculiar interest, or rather, we should say perhaps, the introduction to the report; for Dr. Bond in this introduction, in view of the expiration of five years for which he was first elected, enters into an examination of the sanitary progress made in the district since his appointment. The district, it will be remembered, is the one to which the late Dr. Rumsey gave a foremost position for the awkwardness of its arrangements. The combination consists of eight rural and five urban sanitary districts, some of these districts lying on the right bank, others on the left bank, of the river Severn, in such a way as to interpose, it may be said, a maximum of difficulty to their effective medical supervision. One of the first measures adopted by the present medical officer on entering upon the duties of his office was the institution of a detailed sanitary survey of his district. This, it would appear, owing to the interruptions arising from the performance of other duties, and to the half-heartedness seemingly of some of the sanitary authorities, has been completed only for the most populous portions of the district. With respect to the abatement of the common forms of nuisance, he states that the "district is, as a whole, as free from any serious sources of danger to health arising from the more easily preventable forms of nuisance as it could under the circumstances be expected to be, and it will only require steady and continuous general supervision to keep it in the same state." Among the impeding circumstances here referred to the absence of a sufficient provision for the supervision of the mode in which the inspectors of nuisances perform their duties is suggested; at least so we infer from the particular reference made in the report to the action of certain of the chairmen of the sanitary authorities in giving personal attention to such supervision. Of permanent sanitary works carried out during the five years, two complete schemes of local drainage are named. In this connexion the medical officer refers to the increased difficulties thrown in the way of sanitary authorities in dealing with questions of sewage by reason of the provisions of the Rivers Pollution Act, and takes occasion to object to "the absurd necessity," as he phrases it, "of showing that the nuisance which it is sought to remedy is one that is prejudicial to health," and to urge a system of open drains in certain circumstances; indeed, he would have *covered* drains made illegal in places where a proper system of sewerage does not exist unless authorised by the sanitary authority. Four towns of the district have made arrangements for systematic scavenging since Dr. Bond's appointment. As to water-supply, he says: "The results of action in this matter during the past five years in the combined district have been five complete schemes for the supply of more or less considerable portions of individual parishes or separate contributory districts, and numerous other schemes are in various stages of progress, as well as material improvements in several stages of existing water-supply." Of this work, however, he further observes that it "represents but a small fraction of that which is needed." With respect to infectious diseases, although little or no provision would appear to have been made for isolation, the medical officer is of opinion that, owing to the careful supervision now exercised, and the action taken by him and the inspector of nuisances on receiving information of the existence of infectious disease, it would scarcely be possible for enteric fever to obtain serious hold in his district, and that the prevalence of other infectious diseases is largely neutralised. Of scarlet fever, however, he speaks hopelesaly until there has been "an extensive amendment and reconstruction of the law in regard to the provisions for isolating the sources of infection." With respect to the question of the dwelling accommodation of the labouring classes, he thinks that the "standard of habitability" has been perceptibly raised in his district. Generally, he thinks that it will be evident "that some very substantial results have been already achieved, and that the foundation has been laid for a comprehensive and effective supervision of the public health. The extent to which the edifice thus founded shall continue to be reared during the ensuing five years must depend upon several conditions, but mainly on the progress of sanitary legislation during this period."

HEALTH OF ENGLISH WATERING-PLACES.

THE mortality statistics of forty-six English seaside and inland health and holiday resorts published by the Registrar-General in his Quarterly Return, just issued, relate to the quarter ending June last, and afford, on the whole, satisfactory evidence of their general sanitary condition. The estimated population, in the middle of this year, of the registration districts and subdistricts taken to represent these forty-six watering-places slightly exceeds a million; and the average annual death-rate in this population during last quarter was 18·4 per 1000, against 18·0, 18·4, and 18·1 in the three preceding corresponding quarters. The average death-rate in these watering-places, which include Brighton, Bath, Cheltenham, and a few other large towns, was somewhat below the average rate in the rural districts of England and Wales, but it did not show the same decline from the mean of the rates in the three preceding corresponding quarters which the rate in the whole of England and Wales showed. The death-rate in these health resorts is, in fact, too stationary; and it is only necessary to note the recorded death-rates in these towns from the principal zymotic diseases to be convinced that the death-rate is unnecessarily high. If sanitarians are warranted in considering epidemic zymotic fatality as preventable, the average death-rate from these diseases in forty-six health resorts should not average 1·6 per 1000. Indeed, in Deal, Teignmouth, Tenby, Llandudno, Penzance, and Tunbridge Wells, the death-rate from the seven principal zymotic diseases exceeded the average rate in the whole of England and Wales, which was 2·8 per 1000. The mortality statistics of these

watering-places are often misapplied; and it is not impossible that we shall hear of Herne Bay being described as the healthiest of English watering-places, because in the three months ending June last the annual death-rate in its small population happened to be so low as 8·5 per 1000. Such a conclusion would be as unsound as to label Dartmouth as the most unhealthy of these places because its deaths in the three months under notice were at the annual rate of 28·5 per 1000. To those about to choose a healthy holiday resort the real use of these figures of the Registrar-General is to show whether any epidemic disease is or has recently been prevalent in the place to which their choice leans. The public has undoubtedly the right to be put upon their guard against sending their children to a watering-place in which scarlet fever, for instance, is or has recently been prevalent, even at the risk of spoiling the season of a watering-place that has so suffered. It has been complained that the Registrar-General's areas are larger than those of the watering-places themselves, but the prevalence of an epidemic disease in villages contiguous to a health resort is a source of danger to visitors, of which they should be forewarned. If the import of mortality statistics were more generally considered, sanitary progress would be wonderfully stimulated, especially in watering-places.

WHO IS TO BLAME?

THE inquest referred to in THE LANCET of last week under this heading has, as we predicted, been very properly the subject of official attention at head-quarters. The General commanding at Aldershot made a special report of all particulars to the Commander-in-Chief, and a Board, consisting of Surgeons-General Massy and Irvine, was sent down. The preliminary sitting was held on the 12th inst., and the inquiry ended the following day, but the result is not known. Meanwhile, if various reports that have reached us from time to time are correct, it would appear that the entire system of hospital administration at this camp is faulty. We are informed that the so-called infectious wards consist of one room in a hut, and that this is positively all the "infectious diseases accommodation" for men, women, and children, provided by the War Department at Aldershot. And with this defective accommodation, there exists here, as elsewhere, the now standing grievance, want of medical officers. This latter evil is becoming seriously substantial. For example, we were informed by recent advices from Malta that lately the medical staff at that island was, without any warning, reduced by ten officers, seven being sent to Cyprus, three to England on sick leave, and two also to England in charge of invalids. As our correspondent writes: "A diminution of the medical staff by ten is no joke in such a climate in any of the summer months."

SANITATION IN LANCASHIRE.

WHATEVER may be the grounds on which Lord Salisbury based his recent definition of Lancashire as the most enlightened county of England, it is pretty certain that adequate appreciation of human life and health is not one of its claims to such a distinction. The low sanitary condition of Lancashire, and the high death-rate resulting therefrom, is no new discovery, but the apathy which ignores this sickness and mortality continues one of the most hopeless features of the generally brightening prospect of sanitary progress. The present population of Lancashire exceeds three millions, and is little less than that of the metropolis. The Registrar-General, in his last Quarterly Return, states a few facts with reference to the mortality statistics of Lancashire which afford the strongest evidence of the neglect of public health in many parts of this enlightened county. During the three months ending June last the annual death-rate in Lancashire was equal to 24·8 per 1000, while in the rest of England and Wales it did not exceed 20·3 per 1000. This difference in the death-rate implies that during the quarter 3541 persons died within the county who would have survived if its sanitary condition and its death-rate had corresponded with those prevailing in the rest of England and Wales. This marked excess in the Lancashire death-rate last quarter was not exceptional, inasmuch as a very similar excess has prevailed ever since civil registration was established in 1837. During the thirty years 1841–70, the annual death-rate in Lancashire averaged 27 per 1000, and exceeded by 5 per 1000 the average rate in the whole of England and Wales. The Lancashire rate during the first seven years of the current decade 1871-7, was equal to 26·3 per 1000, against 21·6 in the whole of England and Wales. Thus during the first seven years alone, the excessive death-rate in Lancashire signified the sacrifice of a hundred thousand lives to the neglect of public health, at the rate of nearly fifteen thousand a year. If to the money value of these lost lives be added the further cost incurred by the necessity for supporting in workhouses, prisons, and lunatic asylums the thousands who became inmates through neglect of sanitation, the false economy which is the cause of this neglect would proclaim itself. A large proportion of the Lancashire population is urban in character, but it should be remembered that in the essentially and almost exclusively urban population of the metropolis the death-rate has recently but slightly exceeded the average rate in the whole of England and Wales. The death-rate from fever last quarter, which averaged 0·33 per 1000 in England and Wales, was equal to 0·52 in Lancashire. The Registrar-General points out that the fever-rate, which averaged 0·49 in Liverpool, Manchester, Salford, and Oldham, and 0·48 in nine other of the largest Lancashire towns, was equal to 0·56 in the remaining population of the county. These facts appear to indicate that the greatest neglect of sanitary condition is to be found in the smaller urban and rural sanitary districts of the county where, for the most part, nominal medical officers of health receive nominal salaries, and sanitation makes no progress. The waste of life in Lancashire is not only a local disgrace, but reflects general discredit upon our so-called sanitary organisation that permits its continuance.

PELLAGRA.

THE Italian Parliament has recently abolished the tax on the grinding of corn, and in so doing the correspondent of the *Revue Britannique* states that it has probably struck at the root of the social conditions upon which "pellagra"—that "unclean malady"—depends among the Italian population, preying upon the heart of the country in its military and productive power. The observations of this writer on the subject of the tax and its consequences are so suggestive and instructive that a summary of them cannot fail to interest our readers. He says that the tax on the grinding of corn was one of the errors of which the history of the age makes mention. Before the establishment of the tax the Italians, as nearly all the peoples of the South and East, had already too great a propensity to use farinaceous foods. To the north of the peninsula the favourite food was pollenta, or maize porridge, at Naples maccaroni, in Sicily Barbary figs. There is not a medical journal of the peninsula which does not regard these foods with disgust, and hold them to be responsible for certain filthy affections of the hair and for the persistence of pellagra. The fondness of the foods referred to has become, by habit, so great that even when wheat flour and maize flour are of the same price in the market, the Italian peasant will prefer the latter.

In effect, says our writer, "maize is the providence of high Italy. It provides forage and litter for animals, a

passable combustible, a good manure, and a food which at one and the same time is grateful to cattle, pigs, fowls, and men." Unfortunately, the featherless bipeds do not profit as much from this food as the turkeys and the barn-door fowls, for the maize takes up by far too much room in their stomachs. But it is precisely this bulkiness which recommends it to the Lombard peasant, who stuffs his workmen, his children, and himself with it, and thus deceives their hunger. "Now, there is no vengeance more cruel than that of a dodged appetite." This mania of preferring quantity to quality is, according to Dr. Lombrose, pushed so far by the peasant that not only does he prefer pollenta to wheaten food on account of the greater heaviness of the former, but he prefers to consume maize in a state of putrefaction, when it is refused both by fowls and pigs, rather than have maize bread of good quality, because he can purchase a much larger quantity of the former as compared with the latter, for the same sum of money. The same state of things is observed also in respect to rice in the rice-cultivating districts. Farmers and proprietors have not hesitated to take advantage of this proclivity in providing food for their labourers. So long as wheaten flour was handicapped in the market as against maize, so long there was no hope of escape from this evil. The low-priced maize inevitably became, and would remain, the principal food of the natives. The removal of the grinding-tax will now enable wheat to come into the market on more equal terms with maize, and so lead to the substitution of a better diet among the Italian peasantry. The physical and moral decadence of the Latin race in Italy and Spain, our writer maintains, is largely to be attributed to their defective nourishment, and the "idleness with which they are charged is to be attributed especially to those crammings of the stomach, which convert them into boa-constrictors, devoting three-fourths of their existence to the work of laborious digestion, the most unproductive and mischievous of all occupations."

LOCAL "AUTHORITY" IN NORTH WALES.

OUR correspondent for the Denbigh burghs writes:—"The Denbigh Urban Sanitary Authority appears to be at variance with the Local Government Board. In the autumn of last year diphtheria was fatally epidemic in the borough, and into its causation and the sanitary condition of the borough the Local Government Board directed Dr. Thorne Thorne to make inquiry. When Dr. Thorne's report was considered by the Local Authority, objection was taken to the interference of the 'board above,' and the accuracy of Dr. Thorne's information and observations was called in question. To these strictures the Local Government Board replied by requesting the Local Authority to point out to them what passages in the report were not authentic. The Local Authority's reply is contained in the following resolution, and the spirit in which it was arrived at may be judged of by the remark of one town councillor: 'That the time of the Council was valuable, that they should not notice this letter, but commit it to the waste-paper basket.' Resolved,—'That inasmuch as this Council received no official intimation of the intention of the Local Government Board to send an inspector to report upon the sanitary state of the borough, and therefore had no opportunity of accompanying the inspector nor of offering evidence to him, they cannot but consider the information obtained as unreliable, and the manner in which the same was obtained unsatisfactory and unfair to them as the representatives of the ratepayers.' Previous to Dr. Thorne's visit the officers of the Sanitary Authority were communicated with by the Local Government Board, and every assistance was given by these officers to Dr. Thorne during the course of his inquiry.

"A proposal has been made, and approved by the St. Asaph and Ruthin rural sanitary authorities, to erect a hospital for infectious diseases for the Vale of Clwyd, and to associate it, for purposes of management and administration, with the Denbighshire Infirmary. A preliminary meeting of medical officers of health and district medical officers, at which the honorary medical staff of the infirmary, and Mr. Murray Browne, the Local Government Inspector, attended, was recently held. A resolution as to the desirability of such accommodation being provided was unanimously carried, but the majority of the meeting decided to recommend that each union should provide its own accommodation. For the combined unions a hospital of about thirty-two beds would be required, which would cost some £4000."

MORTALITY AFLOAT.

THE annual Parliamentary Return, showing the number, age, rating, and causes of death in the Mercantile Marine, has just been published, and, though it gives only an approximately correct idea of the rate of mortality afloat, is yet, in some respects, interesting and instructive. The merchant service now employs a total of about 240,000 men. The deaths of last year were 4181, of which 33 were due to small-pox, 99 to cholera, 98 to yellow fever, and 68 to dysentery. Scurvy is responsible for 6 deaths, as compared with 12 in 1876, and 3 in 1875. The rating shows 6 surgeons, 319 cooks and stewards, 109 carpenters, 32 sailmakers, 98 engineers, and 201 firemen. But the imperfection of these details is shown by the fact that 365 are classed as "unknown," the deaths from so-called "natural causes" occupying, as usual, a conspicuous position. Is it not rather humiliating that a Government department, supposed to be in advance of others, cannot in a tabular statement of this kind do better than tell the public that so many sailors in our mercantile marine died from "unknown" and so many from "natural" causes? If the question were asked of the Department, in official routine we should have a rejoinder—These are the captain's replies, as recorded in the log-book. Our answer is, Why not instruct your merchant captains better as to rudimentary medicine and surgery? In this enlightened nineteenth century we think it quite possible to do so.

THE PATHOLOGICAL ANATOMY OF SCURVY.

SCURVY has happily become so much less common a disease than formerly, that the opportunities for applying modern methods of research to its pathological anatomy are comparatively rare. Such opportunities have, however, been numerous at Cronstadt, and Dr. N. Uskow, the superintendent of the Marine Hospital there, has made good use of the material, and has published some of his results. He concludes that scurvy is a general disease with a series of characteristic anatomical changes which are not located in any one organ, but are disseminated through the whole vascular system. The most constant change is the affection of the gums, and upon this the chief part of the microscopical observations have been made. The affection of the gums begins in the deeper layers, and consists in the development of obstruction in the bloodvessels, and one of the consequences of this obstruction is the stasis in the papillæ, the vessels of which are so often distended that of the proper structures of the papillæ only the epithelium may be visible. The appearances in the deeper layers of the epithelium are, first, more or less swelling of the endothelium of the vessels. The lumen of the vessel is commonly increased, and is plugged, sometimes with red corpuscles, sometimes with white corpuscles, rarely with both. Where the white blood-corpuscles are accumulated, the swelling of the endothelium is greatest; where the red corpuscles are accumulated the endothelium is almost normal, but is often detached from the wall of the vessel, and lies among the red

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corpuscles. Later on there occurs an extravasation of red blood-corpuscles, which become transformed into brown translucent granular pigment. Rupture of vessels could never be seen. The swelling of the endothelium at the spots at which the white blood-corpuscles are accumulated is often very great, and it is scarcely to be distinguished from the white corpuscles. Proliferation of the endothelium could not be seen, but at a later stage there are dense firm bundles of connective tissue, between which larger or smaller nests of round granulation cells are embedded. The substance of the connective tissue bundles is not altered, but in the interstices is a light-brown finely granular pigment. The granulation tissue nowhere shows any trace of fatty degeneration. When the disease is intense the papillæ of the gum become gangrenous and break down, and when the destruction extends further the granulation tissue is also affected. The morbid process may involve the deep layers of the periosteum, between which and the bone are found some traces of extravasation and caries. A similar vascular change may be seen, although rarely, in the periosteum of the anterior extremity of the ribs. When the affection is very intense the anterior extremity of the rib bones may be attacked with osteitis rarefaciens, as Slavianski has pointed out, and this may proceed to complete destruction of the compact tissue of the bone, so that the spongy tissue passes without demarcation into the periosteum, and the latter may assume the appearance of marrow. Later the connexion of the ribs and their cartilages may be altered and disturbed. The marrow of the ribs, as well as of the other long bones, is red, and, on microscopic examination, is found to consist of red cells and a few fat-cells and pigment. Thus it appears that in scurvy there is a series of acute changes in the vascular system. Whether the changes in the vessels depend on a change in the blood is difficult to say, but it is noticeable that the number of blood-corpuscles is not abnormal (red 3,500,000 to 4,700,000, white 20,000 to 47,000, per cubic millimetre). Inflammatory appearances are often accompanied by fever, for on simple affection of external parts (without pleurisy or pericarditis) the temperature is from 36° to 38° Cent., and the morning remission from 1° to 1½° Cent.

PHYSIOLOGY AT THE UNIVERSITY OF LONDON.

SEVERAL other protests against the paper on this subject at the first M.B. examination have been received by us since that of "Fiat Justitia" in our issue of the 3rd instant, so that we are compelled to return to the subject. It is unfortunate that the paper set at an examination, which is in many respects a model one, should contain no question in physiology proper, when the heading in the programme for the examination is physiology and histology! The questions in physiological chemistry and comparative physiology would be unexceptionable if such subjects were included in the schedule, and we still think that they are such as any candidate ought to be able to answer, whether they are strictly in the programme or not. We cannot help saying, however, that when only four questions are asked, it is unfair to make any one of them depend on a knowledge of comparative at the expense of human physiology, and that it is likely to become an awkward precedent, unless formally protested against. The appearance of such a question is peculiarly hard this year, inasmuch as the Calendar for 1878 contains a notice that "comparative anatomy is now omitted from the subjects of this (first M.B.) examination," and we do not wonder that complaints are made. The contention of the Registrar, if "Viator" be correct in his summary of his observations, goes much too far, and cannot be sustained for a moment. Is not the explanation to be found in a surmise that the examiners in physiology had not noticed the limitation in the Calendar for this year? If so, a question which goes beyond the ordinary limits of physiology and histology is not likely to be set in future.

HOME-MADE NUISANCES.

WITH all our enlightenment on the subject of health preservation and disease prevention, we have not the wisdom to avoid the creation of needless sources of danger. What, for instance, can be more unreasonable than the practice of accumulating kitchen-stuff, and household dirt of every description in heaps under our windows during the heat of summer? If we must adopt the insanitary system of area-dustbins during the winter, there might be some less objectionable arrangement for the warm months. Nor is this the worst phase of the evil. The scavenging of our cities and towns is done by contract, and the men employed in the work are so underpaid that, as a matter of experience, they decline to discharge their duty except when bribed by householders. Complaints reach us of the extent to which the practice of levying black-mail is carried by the London dustmen, and doubtless the evil is rife elsewhere. Servants are powerless to compel the inert and insolent men who parade the streets with their carts to empty the bins. Householders do not know how to proceed against the defaulters, nor have they time to bestow on their prosecution. The police, of course,—the matter being one of great moment—have "no power" to interfere. Altogether, the system of clearance is a *fiasco*. What with the sinks that are "stopped," the closets that "will not work," the refractory turncocks who will not flush the drains, and the host of home-made nuisances, it is marvellous that disease does not more commonly visit the population, and that the public health is as good as it is.

THE REGISTRAR-GENERAL'S QUARTERLY RETURN.

THE exceptionally low marriage rate during the first quarter of this year, and the increasing proportions of pauperism and of emigration during the six months ending June, are the natural results of the recent commercial depression. The birth-rate, however, was above the average last quarter, and higher than in any previous corresponding quarter, except that of 1876; it was equal to the annual rate of 36·9 per 1000, and in seventy of the largest English and Welsh towns ranged from 26·3 and 26·6 in Bath and Cheltenham, to 47·9 and 49·0 in Barrow-in-Furness and St. Helens. The mean temperature of last quarter was generally above the average, and the rainfall was unprecedentedly heavy. Those meteorological conditions appear to have been favourable to the public health, as the annual death-rate in England and Wales during the three months ending June did not exceed 20·8 per 1000, and was lower than in any corresponding period since that of 1873; it was 1·2 per 1000 below the average rate in the spring quarters of the forty years 1838–77. The Registrar-General points out that this decline in the death-rate signifies that more than 7000 persons survived the last spring quarter who would have died if the rate of mortality had equalled the average rate of the forty preceding corresponding quarters. The death-rate showed last quarter the usual marked variations in different localities—for instance, in the extra-metropolitan portion of Surrey and in Hertfordshire, the rate did not exceed 14·4 and 15·7 per 1000, whereas it ranged upwards in other counties to 22·2 in Stafford and 24·8 in Lancaster. In the principal urban population the death-rate averaged 22·2 per 1000, while in the remaining or rural population it was but 18·9. In twenty of the largest English towns the rates ranged from 17·5 and 18·8 in Leicester and Brighton, to 26·9 and 27·2 in Manchester and Liverpool; in fifty other large town districts, from 14·5 and 15·5 in Dover and Yar-

mouth, to 30·4 and 30·5 in Stockport and Exeter. It is almost needless to say that excessive proportions of zymotic fatality and of infant mortality afford conclusive evidence that these high general rates of mortality signify unsatisfactory sanitary condition. Owing mainly to an exceptional fatality of whooping-cough, the zymotic death-rate in the quarter exceeded that which prevailed in the corresponding quarter either of 1876 or 1877. Whooping-cough was more fatal than it has been in any quarter since the beginning of 1870, when causes of death were first published in the Quarterly Return. It was especially fatal in London, Devonshire, Cornwall, and Staffordshire. Scarlet fever was the second most fatal zymotic disease, but its death-rate was somewhat below the average. The fatality of diphtheria showed a slight excess, while that of measles, and especially that of fever, was considerably below the average. The 825 fatal cases of small-pox in England and Wales showed an increase upon the 405 and 716 returned in the two preceding quarters. Of these, however, no less than 792 occurred in the metropolis and in the three registration divisions containing the home counties. London was the only important centre of infection, and the epidemic there has declined rapidly since the end of April. The most satisfactory feature in the present return is the continued and marked decline in the death-rate from fever, which in the spring quarter of 1870 was equal to 63 per 100,000 persons living, but has since steadily declined to 33 in the quarter now under notice. The fatality of fever is little more than half what it was eight years ago. In these returns of the Registrar-General it is difficult to say which is most conspicuous, the general evidence of sanitary progress, or the local evidence of neglected sanitation; both are so strongly marked.

POOR-LAW EXCUSES FOR NON-PAYMENT OF FEES.

ONE of the latest devices of Boards of Guardians to evade the payment of medical fees needs to be guarded against by the professional supporters of cottage hospitals. It is well known that the rules of these institutions provide for the treatment of cases in their wards by local practitioners. In another column we print a letter from a district medical officer under the Local Government Board, who, having attended a case of fracture in a cottage hospital, has been refused his fee on the ground that "the leg was set in the hospital." It must be perfectly well known to the Board taking this line in respect to payment, that the pretence is untenable. It would be a serious difficulty in the way of extending the system of cottage hospitals, which promises to be of great value to the community, if district officers were not to be duly paid for services rendered at these establishments. As a matter of fact, the guardians ought to congratulate themselves on being saved the costs incidental to surgical treatment, instead of parsimoniously refusing the surgeon's fees. The cottage hospital is not, so far as medical attendance goes, a charitable institution.

THE NORTHERN MEDICAL OFFICERS OF HEALTH.

A JOINT meeting of the North-Western, Northern Counties, and Yorkshire Associations of Medical Officers of Health was recently held in York, in the Council Chamber of the Corporation. Mr. S. W. North, of York, occupied the chair, and the Lord Mayor honoured the meeting by his presence. There was a numerous attendance of the members. Two subjects occupied the attention of the meeting—namely, the regulation of cow-byres and dairies, introduced by Mr. Armstrong, of Newcastle, and Dr. Goldie, of Leeds, and the registration of disease, introduced by Mr. North. Of the former subject much was said and shown proving the necessity for some defined regulation of cow-sheds and dairies, and the Association adopted the following resolution:—"Recognising the evils traced to the insanitary condition of byres, cow-sheds, dairies, and milk-shops, it is desirable that sanitary authorities should have the power and be required to make bye-laws for the better regulation of such places." With respect to the registration of disease, or, rather, we should say, the extent to which registration was to be desired as a practical question, opinion was not unanimous. Mr. North maintained that information as to the infectious sick under poor-law medical care, treated by dispensaries, and, perhaps, also in hotels or lodging-houses, would give all the information that could be practically dealt with or reasonably required. This limited view of the subject did not appear to meet with much favour from the meeting, but, curiously enough, no information appeared to be forthcoming from any of the members as to the experiments, so to speak, now in progress in several northern towns (e.g., Bolton and Huddersfield) as to registration of infectious diseases.

THE RUSSIAN RED CROSS SOCIETY AND SICK AND WOUNDED OFFICERS.

WE announced a short time ago that the Russian Red Cross Society had made arrangements for sending sick and wounded officers needing change of air to various health-resorts in eastern Russia. The applications made to the Society for the benefit of this provision have been very numerous. To meet them the Society has opened an establishment at Samara for the use of koumis. Officers of all grades have been sent to Slaviansk and the Crimea for the benefit of the mineral waters there; and to Piatigorsk, in the Caucasus, officers of the lower grades alone are sent. Each officer is franked to his destination by the Society, and given an allowance of three roubles a day during the journey.

THE EURYDICE.

THE last accounts given as to the progress made in raising this unfortunate vessel seem to indicate the probability of her being towed into Porchester Creek, or even into Portsmouth Harbour. We trust that this proceeding is not really and seriously contemplated. The state of the 'tween-decks must, in a sanitary sense, be deplorably bad, and, having regard to the fact that she must be still, so to speak, the coffin of a large number of unfortunate victims to the catastrophe, the moral as well as physical injury likely to be inflicted upon many persons would be very great, if the reported intention were carried out. On all grounds, it is desirable that the *Eurydice* should be beached, emptied, and broken up in as quiet a spot as possible; the idea of bringing her into a crowded port is to be deprecated in every way.

THE INFANTILE DIARRHŒA EPIDEMIC.

NEARLY a thousand (947) more deaths were referred to diarrhœa in twenty of the largest English towns during the week ending the 10th instant, making 4534 that have resulted from this cause since the hot weather of the last week in June. In the corresponding seven weeks of last year the deaths from diarrhœa in these towns did not exceed 1646. It is satisfactory, however, to note that this recent excessive mortality showed some decline in the week ending the 10th, when the fatal cases were 212 less than the number in the previous week. In Norwich, Sunderland, Wolverhampton, and Birmingham the fatality was greater than it had been in previous weeks, while the largest proportional decline occurred in Leicester, London, Plymouth, Leeds, Sheffield, and Newcastle. The varying incidence of diarrhœa mortality in these twenty towns during the present epidemic has been fully as marked as in previous years. The annual

death-rate from diarrhœa during the past seven weeks has averaged 4·6 per 1000 in the twenty towns, and was equal to 4·3 in London, and to 5·0 in the nineteen provincial towns. Among these provincial towns the diarrhœa rate in the seven weeks ranged from 1·5 in Oldham and 1·8 both in Bristol and Plymouth, to 10·9 in Hull and 11·1 in Leicester. During the summers of 1876 and 1877, as in the present summer, Hull and Leicester, among these twenty towns, showed the highest death-rate from diarrhœa, and we trust that this exceptional fatality is now engaging the serious attention of the local medical officers of health and of the urban sanitary authorities.

MEDICAL CHARITY IN SUNDERLAND.

IT is satisfactory to notice that at a meeting of the Monkwearmouth and Southwick Dispensary—a free dispensary in a prosperous state—the chairman, the Rev. Canon Miles, submitted a scheme for the formation of a family provident dispensary. It was proposed by Mr. Jeffreys, ex-president of the Trades' Council, seconded by Mr. T. Bell, and supported by Mr. Cruison, a working man, that the Family Provident Dispensary be commenced on the 1st January, 1879. Trades' Councils cannot do better than favour the formation of provident habits among their members. In Sunderland there ought to be at least three or four thriving provident dispensaries, paying the medical men well, and securing good medical attendance on working men and their families on honourable and independent conditions. In this prosperous town no less than 6475 persons receive gratuitous relief from the principal medical charities.

OUR Blackburn correspondent writes: "Reverting to the epidemic of enteric fever lately prevalent in this borough, it is satisfactory to be enabled to state that it is almost at an end. Two, or at most three, cases remain under treatment in public practice, with no late occurrences. In private a very few fresh cases have come to light. Scarlet fever, both simple and anginose, abounds, though not epidemically; while infantile diarrhœa comes in for a fair share of professional attention. The interments at the cemetery in the past month were eighty in excess of those in the corresponding month of last year. Casual subjection to test last week of a small sample of the water-supply showed (but not strongly) the presence of nitrites, yielding also a considerable turbidity of chlorides. An unpleasant odour at present accompanies the delivery."

THE report of the Superintendent Medical Officer of Health for Dublin shows that the death-rate for the past four weeks was 23·9 per 1000, or 600 deaths against an average of 484 for the same period of the previous ten years. Zymotics caused 166 deaths, against an average of 106, small-pox proving fatal in 66 instances, every one of which was in the poor localities of the city. The decrease in this disease for the past three weeks has been considerable,—viz., one-third. Only one death from measles was recorded, against 63 in the corresponding period last year. Diarrhœa claimed a large number of victims.

THE International Congress of Mental Medicine met on August 5th, in Paris, under the presidency of M. Baillarger, and terminated its sittings on the 10th inst. About thirty papers were read by members of the Congress, including Lasègue, Falret, Echeverria, Hack Tuke, Voisin, Mierjezewski, Lucas, &c. An animated discussion took place on the best means of providing for criminal lunatics. The principal subjects upon which the memoirs treated were—statistics of insanity, the varieties of general paralysis, transient attacks of mania from a medico-legal point of view, and researches in idiocy. Excursions were made to the asylums of Paris and the neighbourhood, as also to Rouen, the superintendents of these institutions vying with each other in showing the buildings and explaining the methods of treatment. The weather proved very favourable, and added greatly to the success of the excursions. At the close of the Congress the hospitality of the Paris alienists and the action of the Société Médico-Psychologique were acknowledged by Dr. Hack Tuke, who eulogised the general secretary, M. Motet, to whom the success of the Congress appears to have been largely due. It is understood that a full report of the proceedings will be published.

SCARLET FEVER is said to be prevailing seriously in the neighbourhood of Chesterfield, and, it is added, that the medical officer of health attributes much of the dissemination to the assemblage of persons at the funerals of persons who have died from the disease. The prevalence of the fever at Dronfield has induced the School Board to determine to close the Cross-lane School for a period of three weeks. This is a step which should be taken by all school authorities under similar circumstances.

A FATAL case of hydrophobia is reported to have just occurred in Ongar Union House, Essex. The man is stated to have been bitten as long ago as May, 1874, by the same dog that attacked Mr. Brown, veterinary surgeon, of Stanford Rivers, whose case excited considerable local interest about twelve months since, and whose death from hydrophobia took place, it was asserted, three years after the infliction of the wound.

LATE advices report cholera to be raging in the Bassim district, Berar, 1089 cases out of 1662 having terminated fatally. The disease, in a less virulent form, is prevailing also in Akola and Oomrawuttee.

THE Queen has conferred the honour of knighthood on James Salmon, M.D., Inspector-General of Hospitals and Fleets, and Honorary Physician to Her Majesty.

Correspondence.

"Audi alteram partem."

SEWER GAS AND CERVICAL ABSCESS.

To the Editor of THE LANCET.

SIR,—Mr. Edmund Owen has done good service in directing attention to what may prove a grave and extensive sanitary evil. It exists probably in other places as well as in the district of Ealing, where he observed it. The question he has raised is likely to be of something more than mere local interest.

But, be that as it may, I can fully confirm the statement that extensive contamination of the atmosphere by sewer gas exists, or, at any rate, very lately did exist, in this part of Ealing, and the concurrence of diseases indicative of chronic poisoning by foul air. The cases which Mr. Owen cites as having come under my observation form a very striking and significant series. They all occurred in one household.

The first case which came under my notice was one of severe ulcerative stomatitis in a child under two years old, and this was followed by retropharyngeal abscess in the same patient. Shortly after this an older child, a girl of about nine, was brought to me, suffering from constant headache, coated tongue, nausea, loss of appetite, languor, and anæmia. This condition, I concluded, was due to the effect of exposure to foul air; but I got no clue to the source of it. It resisted all medicinal treatment, got well at once with change of air, and reappeared so regularly, time after time, on the child's return home, that she was finally sent away altogether. Since then she has enjoyed perfect health.

Following quickly on these cases, so suggestive of defective hygienic conditions, came others equally significant. Three children—viz., the baby first affected, and two others who had previously escaped—fell ill together with inflammatory swelling of the cervical glands. *In one* this went on to suppuration and abscess, as in Mr. Owen's cases; *in all* there was persistent purulent discharge from the nose. At this juncture I was called down to see the children, and found a source of pollution of the air amply sufficient to account for the long succession of ailments which had afflicted the unfortunate household. In the road running in front of the house, and some twenty yards from the windows, a main-drain was in course of construction. From a wide opening in this great volumes of sewer-gas were pouring forth, tainting the air with sickening odour. With the prevailing wind the foul stream was carried straight to doors and windows, flooding house and garden. The inhabitants lived in and bathed in a continuous stream of this pestilent air. On inquiry I found other evidence of its influence—a simple wound in one, which refused to heal, in spite of all treatment; malaise and languor in another; and so on.

Before long, however, the sewer was completed, the house drains themselves examined and put in order under the direction of the highest sanitary experts, and a pure atmosphere, it was presumed, completely re-established. But full health has not returned to the household. The children coming home fall ill with swollen glands, or nasal discharge, or general malaise, and going away again get as rapidly well. That similar cases occur in neighbouring houses is shown by Mr. Owen's letter. There is evidently something still wrong, and what that is will seem clear enough to anyone who takes a walk along the roads of this odoriferous region. The foul air formerly poured out in a mighty column from the wide opening in the sewer, now issues forth in smaller streams from many a ventilating-pipe and open grating. The improved system of drainage lately carried out has reproduced the old evil in a fresh form, and this is the point to which I wish specially to draw attention. Under such a plan of drainage and sewer-ventilation, the lower levels are relieved at the expense of the higher. The locality of which I speak appears to be air-poisoned in this way. Lower Ealing is saved from the pressure of sewer-gas by the ventilating openings, which draw it off and flood with foul air the neighbouring height.

I remain, Sir, your obedient servant,
W. B. CHEADLE, M.D., F.R.C.P.

Hyde-park place, W., Aug. 8th, 1878.

ON OVARIOTOMY.

To the Editor of THE LANCET.

SIR,—Your question "Who shall, and who shall not, perform ovariotomy?" (July 27) has been most truly and most justly answered in the leading article in your last issue.

How any man, or set of men (as pure surgeons), can be so foolish as to claim the right of performing the operation of ovariotomy I am at a loss to imagine. If the history of this operation be inquired into it will be found it has been performed most frequently by obstetric physicians and surgeons, or by the medical officers belonging to the hospitals specially appropriated to the treatment of the diseases peculiar to women.

The performance of it, as you most justly state, legitimately belongs to those practitioners who are most intimately acquainted with the functions and organic structures of the pelvic viscera, and who treat the diseases which these organs are subject to. An obstetrician knows, or ought to know, how to distinguish the natural changes which the uterus undergoes by pregnancy, from its enlargement by tumours, and also from ovarian tumours. The education of the hand and fingers of an obstetric practitioner enables him to ascertain, by vaginal and abdominal examination, with great diagnostic certainty, morbid changes in the pelvic and abdominal viscera which one unaccustomed to these delicate inquiries would overlook or form erroneous opinions on. It is my solemn conviction that no obstetric physician or surgeon ought to flinch from his duty in the performance of ovariotomy. It is obviously his duty, and reflects discredit on him if he hands over such cases to a professed "*pure surgeon*."

Are there no cases to be found in which hospital surgeons have had pregnant women placed on the table for the supposed purpose of extirpating tumours; and in other cases in which the enlarged pregnant abdomen has been punctured by a trocar with the intention of withdrawing ascitic fluid?

Mr. Lizars performed his last ovariotomy operation in the year 1825, after which period, until about the middle part of 1842, this large abdominal section was as it were unknown, and was treated as one of the *opprobria* of surgery.

About the period above-mentioned Dr. Clay wished me to visit a patient of his who was suffering from an abdominal tumour, for the purpose of ascertaining its nature and of giving an accurate diagnostic opinion. I at once acceded to his request, and visited the patient the following day. I found the tumour of great size, occupying the abdominal cavity, and also completely filling the pelvic cavity. After a very careful examination I was convinced it was an enlarged ovarium. The uterus had been displaced and pushed up above the symphysis pubis. Dr. Clay afterwards obtained the opinion of the late Mr. Wilson, who confirmed my statement. The operation was afterwards successfully performed by Dr. Clay, at which I was present.

I afterwards, at Dr. Clay's request, saw and examined a number of such cases, and attended the operations which he performed. About the same period the late Mr. George Southam requested me to visit several of his patients who were suffering from abdominal tumours, which proved to be enlarged ovaria. He operated on these patients, at each of which I was present.

I have noted these cases of ovariotomy in order to show that this operation (the large abdominal section) was then revived, and has become substantially a recognised procedure by the whole of the profession. It is now practised by medical men in the whole civilised world.

I remain, Sir, yours truly,
Manchester, August 13th, 1878. THOMAS RADFORD, M.D.

MORTALITY IN METROPOLITAN PAUPER SCHOOLS.

To the Editor of THE LANCET.

SIR,—As medical officer of the Westgate District School, I have to request your insertion of the following two or three remarks.

In your table of "Mortality of Sixteen Metropolitan Pauper Schools during the three years 1875, '76, '77," the Westgate School is credited with 38 deaths in the three years. This is incorrect. The proper number is 36. The difference is not great, but still it reduces the average annual rate of mortality from 19·6 to 18·5.

The whole of your observations and calculations are based on the period of age from three years to fifteen. Now it happens that at Westgate the children are admitted at two years of age, which makes a very considerable difference. I think all will admit that the year between two and three in a child's life is one particularly liable to disease and fatality, a fact singularly well borne out by the following statement of the ages at which the 36 deaths occurred—namely, 3 deaths at the age of fourteen years, 2 at thirteen, 1 at eleven, 4 at nine, 1 at seven, 3 at six, 2 at five, 5 at four, 6 at three, and 9 at two years. Thus it is only fair that the last number (9) should be deducted from 36, which leaves 27 as the real number of deaths of children between the ages of three and fifteen. This, applied to the population of 646 as taken by you, gives an average annual rate per 1000 of 10·8, or eight-tenths less than the rate of mortality estimated for children of the same ages out of schools in East London (11·6).

There are besides a great number of circumstances having direct bearing on the mortality rates in pauper schools which render tables of figures respecting them utterly fallacious and insusceptible of comparison. No two boards of guardians "work the school" in the same manner, and the same may be said of the workhouse medical officers; some send only healthy children, whilst others send diseased children, and the practice is constantly changing with change of officers and guardians. There is also extreme fallacy about what appears so simple a thing as the rate of population in these schools, and this arises from the varying proportions of admissions and discharges. Not only are no two schools alike in this respect, but in the same school no two years

are alike. As an illustration of the difficulty of deriving statistical information from small numbers, I will mention that at the West Ham Workhouse school, having an average population of 282, in the year 1875 there were no deaths, 3 occurred in 1876, and none in 1877. Should we be right in saying that the West Ham school had an annual average mortality of 1 per 1000?

I am, Sir, yours &c.,
THOMAS J. VALLANCE, M.D., F.R.C.S. Exam.

THE WAR CRIPPLES IN TURKEY.

To the Editor of THE LANCET.

SIR,—Before closing my hospital, which lack of funds will compel me to do in about a month's time, I am induced to make one more appeal to the British public, which will, I hope be responded to generously. Dr. Stephenson has performed a number of amputations in this hospital, all of whom are rapidly recovering. Some of them will return to their own villages, cripples for life, unable to help themselves or their families, useless cumberers of the ground. Others will stand or squat on the bridge, which, as every traveller will remember, is lined with cripples, one more horrible than another, living upon the *paras* thrown to them by passengers. There are scores and scores of poor crippled fellows languishing in the Turkish hospitals, many of whom have been amputated by English surgeons, but who were left uncared for too soon. Many of these men are young, and have many more years to live. A pound or two given for each would enable Dr. Stephenson to get from England artificial legs and arms, which would make these men independent of begging, and able to earn their own bread. A great deal of simple work can be done with these artificial helps. The Turk does not beg if he can possibly help it, and numbers of them prefer death to amputation.

Dr. Stephenson says: "No one can have visited Constantinople without having been worried and bothered by the hosts of cripples who besiege one for coppers in the bazaars and streets, more especially on the bridge between Galata and Stamboul, where men lie all day long with various deformities, crying '*Para, para*; I say, look here, *para!*' Anyone with common feeling, though he may pass by on the other side, cannot help pitying them. During my whole stay in Turkey I have never yet seen a man with an artificial limb. One must remember that in Turkey there are no workhouses or unions where a poor fellow may at least get a loaf of bread. Here, if a man wants bread he must get the money for it somehow. One of the best ways of earning money here is by carrying luggage, &c. Now, through this manner of living a man with one leg, a strong man with one arm and another artificial one with a hook at the end, can vie with, and will probably, through exciting pity, get more customers than the *normal* with two arms. In the hospitals here there are numbers of poor fellows who have lost either an arm or a leg, and I can most confidently assure you that if Lady Strangford, who represents the only English society out here, does not supply these poor fellows with the necessary artificial appliances, nobody else will, and they will be seen begging their bread about the streets; thus demonstrating the fact that, though the English surgeons who came out to the past war have succeeded wonderfully as far as mere surgical success is concerned, they seem to have taken no heed of the utterly helpless condition in which they have left their cases. In our own hospital we have ten successful amputations of the arm, one 'Chopart,' one excision of hip, besides numerous others, who would greatly benefit by artificial assistance."

My very small fund is all but exhausted, and daily we count over the little that remains, scarcely daring to hope we may have enough to see the fruit of our four months' work here in the restoration to health of nearly all our 160 patients. Eighteen cases brought in too late, having been already from six to twelve months in Turkish hospitals, have died in comfortable beds, grateful for the alleviation of their sufferings. Seventy-two have been sent out, recovered and strong, but many of them cripples. Our funds now admit of our keeping on only seventy cases, whom we trust to leave in good health. We earnestly trust the public will help us to render these poor fellows, though cripples, able to earn their bread for themselves and their families. To supply artificial legs and arms for a hundred or so would herald a new era of hope for the wounded soldier, and surely many a cripple in England would be glad to share with these brave soldiers the blessings that our happier countrymen enjoy in superior surgical assistance.

I remain, Sir, yours truly,
E. STRANGFORD.

Scutari, Constantinople, July 20th, 1878.

A NOTION OF ARMY MEDICAL REFORM.

To the Editor of THE LANCET.

SIR,—A short conversation in the House of Commons some nights ago, to the effect that competitive examinations for admission into the Medical Department of the Army were to be postponed, pending contemplated changes, would indicate that the existing system is doomed. "Not too soon," most people will say, who know anything about the matter.

Would you permit a regimental surgeon, who retired some years before the present system was inaugurated, to say a few words at this crisis? What possible interest can a practitioner take in men who come under his care only casually, soon to be followed by others who in their turn also pass on? How unjust to suffering humanity is it that important and grave forms of disease, coming under the observation of one medical officer, by whom they may have been carefully studied, should, in consequence of changes of regimental stations, have to pass under the care of other medical officers, by whom they have to be studied afresh. I have heard men and officers often complain and declare that within several weeks' time they have been under the medical charge of as many officers.

Contrast this with the former system, imperfect though it was. The regimental surgeon in time came to know most of the men by sight if not by name. He knew the constitutions of many, and their peculiar ailments. He knew all the women and children, having brought not a few of them into the world. He was respected by all, and generally esteemed by his brother officers. Can there be a doubt as to this being a state of matters more favourable than the former to the health and safety of our troops?

But views differ as to how the regimental system is best carried out. I can only here give my own, based on experience and observation. No practitioner should be gazetted into the service who is not thoroughly versed in every branch of his profession. This being provided for, then no seniority or superior military rank should give one medical man any power to interfere with the purely professional parts of another's duties. As professional men all ought to be on perfect equality, consulting each other—juniors seniors and seniors juniors—as each may think proper. Without wishing to exalt my own merits, I would here instance my own experience. Having, from circumstances, considerably more than an average insight into my profession, which I do not say I thoroughly availed myself of, I entered the service having that confidence which experience gives.

There is no reason why senior medical officers should not control juniors in non-professional matters; but, I repeat, all should be on a par professionally. Then, as to military rank, why multiply grades of rank? A member of a learned profession, especially if he also holds a university degree, can very well stand, and feel himself, quite independent of military rank. A long title represented by a number of extra letters, added to such as he already possesses, is of no use to him, except in so far as it may regulate his choice of quarters, his standing amongst his combatant brother officers, or the amount of his allowances. All, I believe, would greatly prefer "the solid pudding to the empty praise."

Furthermore, there is far too much administrative work required from medical officers. Even when accompanied by a higher grade of military rank, members of a scientific profession cannot help feeling degraded by having little but office work to do. I would therefore reduce the number of administrative medical officers, and transfer some of their office work to other departments, with the exception of a limited number of officers, selected, not by seniority, but by qualification, for the duty of supervision; would have all others equal in rank professionally; while the juniors would be subject to the seniors in non-professional matters, within certain limits.

Gazette qualified men as regimental surgeons, raise their pay, but not their rank, at fixed intervals—say of three years; make them subject to military control and to the orders of administrative medical officers in non-medical matters, but quite independent in the practice of their profession; and let the duties of the administrative staff be those of supervision and of providing extra medical aid where and when required, and of receiving and inspecting the returns required by the rules of the service. I would go even further, and say that it is quite unnecessary that the Army Medical Board in London should be so largely composed of medical officers. Retain a head-quarter administrative staff there, hand over the selection of candidates to examining boards at the capitals of the three kingdoms, and transfer much of the mechanical work of the department to non-medical officials.

Pray excuse so long a letter.

Yours faithfully,

JAMES JOHNSTON, M.D.,
Late Regimental Surgeon.

Edinburgh, 10th August, 1878.

OBSTRUCTION OF THE BOWELS.

To the Editor of THE LANCET.

SIR,—The following case may be interesting to many of the readers of your journal:—

E. S——, a grocer, aged twenty-four, well nourished, of a habitually costive nature, frequently having gone for three days at a time without any action of the bowels, was seized on February 6th with pains in the belly, constant vomiting, and the passage of much flatus. Becoming worse in the night, he sent for the nearest medical man, who gave him a draught. This was rejected. A dose of morphia, hypodermically, however, staid the sickness, and produced sleep. The symptoms returned in the morning. I was sent for about midday. I found him in great pain, most severe over the right iliac region, where was discernible a decided fulness, which was resistent to the touch and dull on percussion. The pain, aggravated on manipulation, extended along the course of the larger bowel. The abdomen was distended. The bowels had not acted properly since the 4th. The usual seats of hernia displayed nothing. Pulse 98, full; temp. 102° F.; resp. normal. Ordered half an ounce of castor oil to be taken at once; half a grain of opium, with a grain of calomel, in pill every four hours; a soda mixture, containing a little lemon and hydrocyanic acid; ice to suck; turpentine stupes to belly; at night the sixth of a grain of morphia subcutaneously. From this time up to the 11th he gradually became worse, passing nothing by the bowel, in spite of an enema of castor oil and turpentine every morning and enemata of warm water and soapsuds every four hours. There was constant vomiting, with hiccough, and much tympanites. The pulse ranged from 96 to 112; the temperature from 102·4° to 100°; the breathing was hurried, and entirely thoracic.

Feb. 11th.—Ordered an anema containing one grain of the extract of belladonna to six ounces of warm water; and extract of belladonna pill, one-sixth of a grain.

12th.—Two stercoraceous vomits; no action of the bowels. Pulse 102, feeble; temp. 100°; resp. 28. Ordered eight grains of calomel to be taken at once, to be followed in three hours' time by an enema of as much warm water as could be passed up. The calomel produced a deal of rumbling, and the injection, about three pints, returned, decidedly fæcal.

13th.—Belly less distended. Three stercoraceous vomits. To go on with the injections every six hours. A milk and beef-tea diet.

14th.—Two biliary vomits. Two motions, after injections, containing scybala. From this date he began to improve. Ordered fish, eggs, &c.; and two-grain doses of quinine three times a day. The pain and fulness which were noticed at the commencement of the attack remain unaltered.

23rd.—Swelling increased in size. Very painful. To be painted, night and morning, with the tincture of iodine.

March 25th.—Swelling larger, with indistinct fluctuation. Ordered poppy fomentations, and linseed-meal poultices sprinkled with laudanum.

April 12th.—The swelling, which has been slowly increasing, is now of an immense size, fully five inches in diameter every way. Very prominent, with marked fluctuation. Patient will not consent to have it lanced. Ordered a pint of stout a day.

14th.—The abscess broke to-day, and discharged about three-quarters of a pint of sanious and most stinking pus.

May 4th.—Suppuration ceased; wound healed.

18th.—Patient improved in health, and increased in weight.

July 4th.—Complains of a weakness over the spot where the abscess broke. Advised to wear some kind of support, in addition to the flannel binder he has worn since May 4th.

In my opinion the case commenced as one of typhlitis, set up no doubt by the frequent irritation of accumulated fæces; followed by the intestinal obstruction, and eventually giving rise to perityphlitis, and the formation of abscess, which fortunately pointed and discharged externally.

Lastly, as to my line of treatment in the above case, I think that,—taking into consideration the fact of the symptoms pointing to some perityphlitic mischief, and bearing in mind the serious nature of the case, which was sure to end fatally if the bowels remained closed, and knowing what a hazardous and unsatisfactory undertaking it is to operate in these cases,—I was justified in giving the large dose of calomel, rather than having resort to the dread alternative of opening the abdomen.

I am, Sir, yours truly,

FRED. EVANS, M.B.

Cardiff, August 13th, 1878.

THE MANCHESTER EXPERIMENT IN PROVIDENT DISPENSARIES.

To the Editor of THE LANCET.

SIR,—A report of a Sub-Committee of the Midland Counties Branch of the British Medical Association and the Midland Medical Society on the subject of Provident Dispensaries has been put into my hands, in which I find the following passages:—

"The experience of Manchester is conclusive as to the necessity of proceeding most cautiously, if existing evils are to be remedied without incurring the risk of adding an equally great one under another name. Although in that city guarantors have for some years paid in round numbers £1000 per annum in aid of provident dispensaries, the members subscribing to them have largely diminished, and the scheme has failed to commend itself to the local members of the medical profession.

"Notwithstanding such experience, individual members of our Societies are free to act according to their judgment and inclination; but, as representatives of the profession, our Committee have declined to take part in a scheme in which failure seems inevitable while the local medical charities are administered as at present."

I am not acquainted with the full scheme proposed for the Birmingham provident dispensaries, but as the above quotations pronounce failure to be inevitable, and refer to Manchester for illustration, it may be as well to show how far Manchester has failed, and the reasons thereof.

The promoters of the Manchester scheme intended to follow the lines which have led to success in Northampton, Coventry, Leicester, and Derby, and to combat the abuses of the medical charities by bringing efficient medical aid within the means of the working classes generally, hoping that appeals to their feelings of self-reliance and independence would attract the bulk of the well-conducted to these institutions. Some members of the medical profession suggested that if the medical charities could be induced to co-operate, and to refuse assistance to all applicants who were found able to pay dispensary fees, then we could at once stamp out the abuse of those charities and provide the remedy. Now, in order to secure this co-operation, it was found necessary to restrict admission to the provident dispensaries to families in receipt of not more than 30*s.* per week average wages. For the sake of securing this valuable co-operation, and of speedily remedying the abuse of the charities, this restriction was submitted to; but, as we were not able to cover the two boroughs with provident dispensaries, and as several of the charities have not come into the scheme, the provident dispensaries have had their sphere of

action greatly restricted, and have still to compete with institutions whose abuses they started to remedy. Now the medical charities could not be carried on without honorary medical officers, and these latter can govern the proceedings of the hospitals. The inevitable conclusion is, therefore, that the medical men connected with the charities which have not joined in the scheme are not in earnest in their wish to reform the abuses of their institutions.

Here, then, is the first element of our partial failure, resulting not from any defect in the scheme of provident dispensaries, but from our having aimed at too much, considering the materials we have had to work with. We unfortunately admitted on our staff all qualified medical men who chose to apply, and as a result the income obtained by some was not sufficient to satisfy them; whilst others, after they had got a goodly number of patients, left us, and endeavoured to take the patients with them. In addition to this there was a great flock of sick people who came to us whilst there was no entrance-fee to pay, and who left as soon as they became convalescent; so that it is not difficult to understand why Manchester has not done better, nor will it be difficult for Birmingham to avoid our errors.

But what is the extent of our failure? We had six provident dispensaries, with 11,370 paying members, at the end of last year, and these are now on the increase. The £1000 a year provided by the guarantors has covered establishment charges, including fittings, surgical implements, and stocks of drugs. One of the dispensaries is now self-supporting, a second cost the council only about £50 last year, and will, I trust, cost less this year. Upon the whole, the requirements from the council are now not more than £500 per annum, and they are not likely to be increased unless we open more dispensaries; and even if the aid of the council should cease, it is very unlikely that the provident dispensaries would be given up.

The alternative I should like to lay before the medical profession is this—Will they join the provident dispensaries in this way, helping the working classes to form habits of self-reliance, and at the same time putting an end to the abuse of medical charities; or will they encourage the benevolent public still to offer a premium on mendicity, and thus prevent that growth of independence and forethought which the provident dispensaries render possible? The report of the committee which I am now discussing admits that for many years the recipients of medical charities in Birmingham have increased "in a far greater proportion than the population," and they furthur admit that "to encourage such abuse, or permit it to continue, is to foster improvidence and fraud." I presume this committee would also admit that a considerable proportion of the working classes, if they have sickly families, cannot possibly pay the ordinary medical fees, and that for them the provident dispensaries would be a great blessing, enabling them to avoid the dangers of debt.

Some combination is evidently necessary for the cure of these numerous evils, and it seems to me that those who oppose or seek to delay the establishment of provident dispensaries are bound in honour to produce a better scheme for the purpose. This the medical committee has not only failed to do, but, by misrepresenting what has been done in Manchester, it seems to be their desire to prevent others from remedying the evils by means known to have been successful elsewhere.

I am, &c.,

JOHN WATTS,
Chairman of Provident Dispensary.

Rawson-street, Manchester, August 5th, 1878.

*** The above letter continues a discussion of the greatest interest both in a social and professional respect, and one upon which we shall have something more to say ere long. A serious feature in this letter is the extent to which it blames medical men for the slow and partial success at Manchester. We shall only at present make one more remark on Mr. Watts's interesting communication. He mentions the successful instances of provident dispensaries at Northampton, Coventry, Leicester, and Derby. We are not aware that in these towns the medical charities or the medical men have acted differently from the way in which it is complained they have acted in Manchester, from which we should infer the necessity for some other explanation of the different results.—ED. L.

POOR-LAW EXCUSES FOR NON-PAYMENT OF FEES.

To the Editor of THE LANCET.

SIR,—I should be glad if some one of your readers—and there must be many who know—would kindly inform me on the following question, as to whether the Board of Guardians are right or wrong; and if wrong, how shall I be able to ascertain the law on the subject, and obtain redress?

A man breaks his leg, and, under ordinary circumstances, as district medical officer, I should be summoned to attend him; an order would be given by the relieving officer, and in due time I should obtain my fee. However, in the present case, the patient is removed to the Cottage Hospital—also within my district,—and I, as district medical officer, am fetched to attend him. I do so attend, and set his fracture. The Board refuse to grant an order (which carries the fee), on the grounds that "the leg was set in the hospital."

I am not a surgeon to the Cottage Hospital, either paid or honorary, but have, in common with all medical practitioners here, the privilege of attending my own patients if admitted as such; so also patients admitted without any regular medical attendant can, if they express the wish, be attended by any one they choose, or, in default of an expressed choice, by the hon. surgeon. Patients contribute a certain sum weekly towards their maintenance.

If I am to be deprived of my fees in this way, I shall be mulcted in a considerable sum every year that the guardians are otherwise bound to pay, or else I must refuse for the future to admit any parish cases, and so a great many sufferers will be deprived of skilled nursing and all the many advantages of a Cottage Hospital over a poor man's home.

I am, Sir, yours obediently.

Surbiton, August 14th, 1878. OWEN COLEMAN, M.D.

KOUMISS IN DIABETES.

To the Editor of THE LANCET.

SIR,—On the 6th January, B. D——, aged twenty-nine years, presented himself at my consulting-room with all the symptoms of diabetes. His pulse was 100; weight 8 st. 7 lb.; bowels constipated; passed eighteen pints of urine in twenty-four hours, and sugar was present in it in considerable quantities. Had a very jaundiced appearance. Could not lie long without having to get up to pass urine. For some considerable time before the above date he was under my care for this disease, and, after other attempts to alleviate his symptoms unsuccessfully, was put upon skim-milk treatment. Upon this he improved for a time, so much so, indeed, as to be able to resume work, which he had been obliged to give up. This did not continue, however, and he gave it up and was soon obliged to present himself again. He was rapidly losing flesh and strength. Having not long before this read an account of some cases in THE LANCET that were benefited by koumiss, I determined to give it a trial, and ordered an ounce five or six times a day.

Jan. 11th.—Says he feels better. Pulse 98. Is not so jaundiced in appearance. Bowels open every day; passed in twelve hours, from 6 o'clock last evening to 6 o'clock this morning, eight pints of urine, carefully measured, of sp. gr. 1036.

I will not trouble you with particulars of every examination, but say that from this date to the 31st of March he continued this treatment, and that the improvement was remarkable. On the 31st of March the urine passed in twenty-four hours was five pints (a great diminution compared with eighteen pints on the 6th of January), its sp. gr. being 1024, and of the usual amber colour it presents in health. The pulse was slower and stronger; the tongue clean; appetite good. The jaundiced appearance had almost quite passed off, and he had increased somewhat in weight. The inordinate thirst which was at first a marked feature had disappeared, and he had been at work for some weeks, and said he has not felt so well and strong for more than twelve months.

During treatment he twice neglected to take his koumiss for some days, and the effect was most noticeable. During these intervals no diminution of urine took place, but within forty-eight hours after resuming it the quantity began to diminish, and the diminution was continuous

and gradual. So confident am I that the improvement was due to the action of the koumiss that I shall employ it with confidence should a case of this kind come under my care again. The koumiss was not employed to the exclusion of every other article of diet. He was allowed a non-sugar-forming diet.

I saw the man last in May, and he was then at work, feeling fairly well, and the urine had not increased in quantity. I put the case on record without comment at present.

I am, Sir, your obedient servant,

Luton, Aug. 5th, 1878. D. THOMSON, M.D.

Obituary.

WILLIAM BENJAMIN WINKFIELD, L.R.C.P. &c.

BY the sudden death of this able and much-respected practitioner, from the results of a heat-stroke, Shirley has sustained a loss which cannot easily be repaired. All that professional skill and the most solicitous care could do in attempting to ward off the fatal result was essayed by his friends: Mr. Sampson; Surgeon-General Maclean, of Netley, Mr. A. Winkfield, of Oxford, his brother; and Mr. Knapton, his assistant.

William Benjamin Winkfield was born in London in August, 1834, and received his education at the Grammar School at Bedford. He entered the profession as a pupil at the Bedford General Infirmary, where, in 1854, he gained a prize for proficiency in Anatomy and Physiology. Subsequently he proceeded to London, and entered as a student at St. Bartholomew's Hospital, where, by his zeal and ability, he soon won the confidence and esteem both of his teachers and of his fellow-students. He was one of the most successful competitors for prizes at the hospital in the years 1856–7, and gained there one of the senior scholarships, the highest distinctions awarded to the pupils of the hospital. In 1858 he obtained his diplomas, and soon afterwards settled in practice at Kettering, Northamptonshire; but, owing to severe attacks of asthma, was not able to remain there permanently, and in 1865 he removed to the more genial climate of Shirley, where, in addition to the work of an extensive private practice, he performed in a most efficient manner the duties of medical officer of health to the Shirley Local Board.

His funeral, on the 6th July, bore witness to the high esteem in which he was held at Shirley, nearly every shop and private house being half closed, and many of his former patients and friends, amongst them the president and members of the Southampton Medical Society, the chairman and other members of the Shirley Local Board, taking part in the sad ceremony.

His genial character, kindness of heart, and amiable disposition endeared him to all his patients and friends, and his gentlemanly bearing and high sense of honour bore high testimony to his social character and worth. Beloved by the poor, at all times a welcome guest with the rich, it may truly be said of him that he passed away regretted, beloved, and sincerely lamented. He leaves a widow and four young children to bewail their untimely loss.

Medical News.

UNIVERSITY OF LONDON.—The following candidates have passed the recent First M.B. Examination:—

ENTIRE EXAMINATION.

FIRST DIVISION.

Bassett, Henry Thurstan, Queen's Coll. Birm. and Guy's Hosp.
Bowe, Francis, St. Bartholomew's Hospital.
Bredin, Richard, Liverpool Roy. Infirm. Sch. of Medicine.
Cantin, Louis Alfred, St. Bartholomew's Hospital.
Chisholm, William, B.A. Sydney, University College.
Colborne, William Wriothesley, University College.
Cox, Frederick Augustus, St. Mary's Hospital.
Cuff, Edward Meade, St. Bartholomew's Hospital.
Day, Donald Douglas, St. Bartholomew's Hospital.
Dickinson, Thomas Vincent, St. George's Hospital.
Graham, Albert William, St. Bartholomew's Hospital.
Honeyburne, Richard, Liverpool Roy. Infirm. Sch. of Med.
Hoole, Henry, Charing-cross Hospital.
Horsley, Victor Alex. Haden, University College.
Jones, Robert, St. Bartholomew's Hospital.
King, David Alex., St. Bartholomew's Hospital.
Kirsopp, Thomas, St. Bartholomew's Hospital.
McDonnell, Denis, King's College.
Maguire, Robert, Owens College.
Mandsley, Henry, University College.
Mott, Frederick Walker, University College.
Murray, Hubert Montague, University College.
Newsholme, Arthur, St. Thomas's Hospital.
Parker, William Rashton, University College.
Parkes, Louis Coltman, University College.
Pasteur, William, University College.
Permewan, Arthur Edward, University College.
Pratt, Reginald, University College.
Rake, Beaven Neave, Guy's Hospital.
Shaw, John, St. Thomas's Hospital.
Shearman, Percy Edward, University College.
Weber, Charles Alfred, B.A., B.Sc., St. George's Hospital.

SECOND DIVISION.

Atmaram, Anundrao, B.Sc., University College.
Ballance, Charles Alfred, St. Thomas's Hospital.
Brooke, Henry Ambrose Grundy, B.A., Owens College.
Collingwood, David, Liverpool Roy. Infirm. Sch. of Med.
Collins, William Job, St. Bartholomew's Hospital.
Dallmeyer, Andrew William, University College.
Davidson, John, King's College.
Donovan, Denis William, University College.
Groom, Henry Thomas, St. Bartholomew's Hospital.
Hoskyn, Donald Templeton, University College.
Hurst, George, B.A. Sydney, University of Edinburgh.
Marsh, George Ryding, Guy's Hospital.
Orsm, Richard Rundell William, Guy's Hospital.
Rice, Edward, St. Bartholomew's Hospital.
Routh, Anand Jules McConnul, University College.
Silk, John Frederick William, King's College.
Smith, Henry, St. Bartholomew's Hospital.
Squire, John Edward, University College.
Swale, Harold, St. Thomas's Hospital.
Sykes, William Ainley, St. Bartholomew's Hospital.
Tait, Edward Sabine, St. Bartholomew's Hospital.
Thomas, Walter Duncan, St. Bartholomew's Hospital
Walters, Fredk. Rufenacht, St. Thomas's Hospital
Watkins, Christopher James, University College.
White, Charles Haydon, St. Thomas's Hospital.

EXCLUDING PHYSIOLOGY.

FIRST DIVISION.

Barnes, Geo. Frederic, St. Bartholomew's Hospital
Sellers, William, University of Edinburgh.

SECOND DIVISION.

Smith, John, Guy's Hospital.
Whiting, John, St. Bartholomew's Hospital.

PHYSIOLOGY ONLY.

SECOND DIVISION.

Crisp, Thomas, St. Thomas's Hospital.
Fooks, George Ernest, St. Bartholomew's Hospital
Hughes, Richard, St. Bartholomew's Hospital.
Roeckel, Waldemar Joseph, St. Bartholomew's Hospital.
Suckling, Cornelius Wm., Birmingham Sch. of Medicine.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Aug. 8th:—

Cary, Joseph, Paul, Cornwall.
Dunn, Walter, Gordon-square.
Lavis, Hy. James Johnston, Stalbridge, Dorset.
Powell, John James, Weybridge.

ROYAL COLLEGE OF SURGEONS IN IRELAND.—At recent examinations the undermentioned gentlemen obtained the Fellowship of the College:—

Kendal Franks. | Francis Peirce.

ROYAL COLLEGE OF SURGEONS.—From the annual report of the receipts and expenditure of this institution, which was laid on the table at the last meeting of the Council, it appears that the former amounted to £15,486 9*s.* 5*d.*, derived principally from fees paid on admission to the fellowship, membership and dental diplomas amounting to £12,028 5*s.*; dividends and rents from chambers, £2550 15*s.* 10*d.*; trust funds, £249 2*s.* 6*d.*; elections into the Council, £42. The chief items in the expenditure consisted in fees paid to the Council, courts, and boards of examiners, amounting to £5814 10*s.*; salaries and wages required, £3858 9*s.* 6*d.*; pensions, £278 12*s.* (the death of Mrs. Belfour will reduce this amount by £200); taxes, rates, and diploma stamps, £1,380 6*s.*; expenses in connexion with examinations, £319 0*s.* 10*d.*—Summary: Balance at banker's Midsummer-day, 1877, £585 9*s.* 7*d.*; receipts, £14,900 19*s.* 10*d.*: total, £15,486 9*s.* 5*d.* Expenditure, £14,528 16*s.* 2*d.*

The Library and Museum of the Royal College of Surgeons will be closed as usual during the month of September.

The preliminary examinations in arts, &c., for the diplomas of Fellow and Member of the College, will take place early in the ensuing month, and already a very large number of candidates have entered their names.

THE Library of the Royal Medical and Chirurgical Society was closed on Saturday last, and will be re-opened on Thursday, September 12th next.

DR. WILLIAM JONES, of Ruabon, has been presented with an illuminated address in gilt frame, and a silver salver and tea and coffee service, the salver being inscribed "Presented to Doctor William Jones, with a silver tea and coffee service, by his many friends and admirers. July, 1878."

HOSPITAL SATURDAY FUND.—The fifth meeting of the board of delegates for the present year was held on Saturday last in the Board-room of the West London Hospital, kindly lent for the occasion. In the absence of Mr. Samuel Morley, M.P., the president of the fund, Mr. John Hughes, C.C., the chairman of the council, presided. There was a good attendance of members, and the secretary, Mr. Parr, gave a full report of the progress of the work, which the delegates seemed to think angured a successful collection. Mr. A. W. Mackenzie (honorary secretary) then brought up the plan of distribution as approved by the council. In moving its adoption he explained that the distribution committee, in order to make the plan as perfect as possible, had put themselves in communication with some of the leading medical men of London, who had been good enough to give some valuable advice; they had also examined the plans in use by the Saturday or Sunday Funds of Dublin, Liverpool, Manchester, Portsmouth, Leeds, Nottingham, and Birmingham, and he thought the scheme as now submitted would be found to work well. It was stated that the council had extended the time for the receipt of applications from hospitals and dispensaries to participate in this year's collection to the 13th August. Hospital Saturday itself has been fixed for the 7th September.

IMPORTATION OF SMALL-POX.—The "Liverpool Daily Post" says:—"A rather startling revelation was made at the meeting of the West Derby Board of Guardians yesterday. It was stated that a woman, who had come from Dublin by steamer, had been admitted to the workhouse hospital suffering from small-pox, and a few months before another woman and four children who had just come from Dublin were admitted in a similar condition. The chairman remarked that it was a serious thing that small-pox, after being stamped out at so much expense in Liverpool, should be imported from Dublin, where there was an epidemic of the disease at present; and that had the vessel which conveyed the woman come from a foreign port, she would have been detained in quarantine. There certainly would seem to be much need of inquiry into the circumstances of the case, for a more dangerous practice than the conveyance of infected people in such greatly frequented steamers as those running between Dublin and Liverpool it would be difficult to imagine. Experience has shown how rapidly small-pox makes its way in this town, and how difficult it is to get rid of when once it has established itself here. The serious attention of the medical officer of health to the matter is most urgently needed."

Medical Appointments.

BLACKER, E. J. L., M.B., L.R.C.S.I., has been appointed Certifying Factory Surgeon for Thrapston, vice Morris.

BRANNIGAN, R. A., M.D., C.M., has been appointed an Assistant House-Surgeon to the South Dispensary, Liverpool.

CLARK, Mr. G. H., has been appointed a House-Physician to the London Hospital, vice Greenwood, appointed a House-Surgeon.

COBB, W. H., L.R.C.P.L., M.R.C.S.E., has been appointed Medical Officer of Health for the Ashford Urban Sanitary District, vice Sheppard, resigned.

CORRY, W., M.D., C.M., has been appointed Medical Officer, Public Vaccinator, &c., for the Eastern Division of the Omagh Dispensary District of the Omagh Union, co. Tyrone, at £160 per annum and fees, vice McMaster, appointed to the Ballygawley Dispensary of the Clogher Union.

COMINE, J. M., L.K.Q.C.P.I. & L.M., L.R.C.S.I., has been appointed Certifying Factory Surgeon for Ormetherley, vice Longford.

DODD, H. F., L.R.C.S.I., has been appointed Medical Officer, Public Vaccinator, &c., for the Tuosist Dispensary District of the Kenmare Union, at £100 per annum and fees, vice Mayberry, resigned.

FERNIE, E., M.D., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer of Health for the Stone Sub-district of the Stone Rural Sanitary District, at £40 per annum, until 29th September, 1879.

FISHER, Mr. F. B., has been appointed a House-Surgeon to the London Hospital, vice Clippingdale, whose appointment has expired.

HARVEY, Mr. S., has been appointed Public Analyst for Faversham.

HOPKINS, J. W., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer of Health for the Eccleshall Sub-district of the Stone Rural Sanitary District, at £40 per annum, until 29th September, 1879.

HORNE, T., L.R.C.P.Ed. & L.M., L.R.C.S.Ed., has been appointed Medical Officer and Public Vaccinator for the Sandwich District of the Eastry Union, Kent, vice Emmerson, retired.

HOWDEN, T., M.D., L.R.C.S.Ed., has been appointed Medical Officer and Public Vaccinator for the Parish of Haddington, and Medical Officer of Health for the Landward District of the Parish, vice T. Howden, jun., M.D., deceased.

MANDERS, H., F.R.C.S.E., L.S.A.L., has been appointed Medical Officer and Public Vaccinator for the Frimley District of the Farnham Union, Surrey, vice Fry, deceased.

PALMER, J. F., L.R.C.P. & M.R.C.S., has been appointed fourth Attending Medical Officer for the Chelsea District of the Provident Medical Institution.

PHELPS, W. H. G., M.D., Surgeon Third Battalion Somerset Rifle Volunteers, has been appointed Medical Officer in Charge of the Severn Defences, vice Rahilly, relieved.

RUSSELL, F. R., M.B., C.M., has been appointed House-Surgeon to the Peterborough Infirmary, vice Illingworth, resigned.

RUTHERFORD, R. L., L.K.Q.C.P.I., has been appointed Registrar to the Children's Hospital, Birmingham, vice Cardew, resigned.

SNOWDEN, G. H., M.R.C.S.E., has been appointed Resident Medical Officer to the Lock Wards of the Royal Portsmouth, Portsea, and Gosport Hospital, vice Bird, resigned.

SYLVESTER, G. H., L.R.C.P.L., M.R.C.S.E., has been appointed House-Surgeon to the South Devon and East Cornwall Hospital, Plymouth, vice Herbert, resigned.

WALKER, J. D., L.R.C.P.Ed., L.R.C.S.Ed., has been reappointed Medical Officer of Health for the Fylde Rural Sanitary District, at £75 for one year.

WALTER, W. H., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer and Public Vaccinator for the No. 5 District of the Yeovil Union, vice Harvey, resigned.

WOOD, R., M.R.C.S.E., L.S.A.L., has been reappointed Medical Officer of Health for the Ilkeston Urban Sanitary District, at £30 for one year.

WRIGHT, G. A., B.A., M.B., F.R.C.S., has been appointed Surgical Registrar to Guy's Hospital, vice Durham, resigned.

Births, Marriages, and Deaths.

BIRTHS.

BARNES.—On the 6th inst., at West Bromwich, the wife of A. R. Barnes, M.B., of a daughter.

CONOLLY.—On the 2nd inst., at Margate, the wife of Rowley Conolly, M.R.C.S.E. (prematurely), of a daughter, still-born.

DOUGLAS.—On the 9th inst., at Union-street, Greenock, the wife of John C. Douglas, M.B., of a son.

FOURACRE.—On the 7th inst., at Albert Villas, Hornsey-road, the wife of R. P. Fouracre, M.R.C.S.E., of a daughter.

HOLMAN.—On the 10th inst., at Keighley, Yorks, the wife of R. Colgate Holman, M.R.C.S.E., of a daughter.

KEITH.—On the 21st June, at Nuwara-Eliya, Ceylon, the wife of W. G. Keith, M.B. &c., Assistant Colonial Surgeon, of a daughter.

PARSONS.—On the 8th inst., at Crofton House, Bristol, the wife of James St. John Gage Parsons, L.R.C.P.Ed., of a son.

RUTHERFORD.—On the 6th inst., at Ballinasloe, co. Galway, the wife of William Rutherford, M.D., of a daughter.

SPENCE.—On the 13th inst., at Burntisland, Fife, the wife of Robert Spence, M.B., C.M., of a son.

SWANSON.—On the 14th inst., at Lawrence House, York, the wife of George I. Swanson, M.D., of a daughter.

MARRIAGES.

BATE—WHITEHILL.—On the 27th ult., at St. Mary's, Glasgow, Thomas E. L. Bate, L.K.Q.C.P.I., Surgeon, Bengal Medical Staff, to Mary Arthur, daughter of the late Matthew Whitehill, Esq.

BEECOMBE—EATON.—On the 11th ult., at St. Paul's, Rondebosch, near Capetown, Cape of Good Hope, by the Venerable Archdeacon Badnall, John Dobrick Buncombe, M.R.C.S.E., to Harriet Mary, daughter of the late Richard John Eaton, Esq.

DEATHS.

DORSEY.—On the 16th May, at Ipswich, Queensland, William McTaggart Dorsey, Esq., M.D., aged 64.

DREW.—On the 6th inst., at Stow-on-the-Wold, Gloucestershire, after a tedious and painful illness, James Drew, M.R.C.S., aged 64.

HICKSON.—On the 4th inst., at Huntriss-row, Scarborough, John George Hickson, M.D., aged 47.

HUNTER.—On the 8th inst., at St. Andrew's Vicarage, Hastings, the residence of his brother-in-law, after two months' illness, Charles Hunter, M.R.C.S., L.S.A., only son of the late Dr. John Charles Hunter, of Wilton-place, Belgrave-square, aged 43. Friends will kindly accept this intimation.

JOHNSTON.—On the 2nd inst., on board H.M.S. *Himalaya*, on the passage from Cyprus to Malta, Wingate Kidd Johnston, L.R.C.P.L., Surgeon, H.M.S. *Pallas*, aged 24.

KING.—On the 19th ult., at Oakham, Rutlandshire, Francis Turner Welby King, M.R.C.S.E., aged 58.

ROGERS.—On the 15th ult., at Bombay, A. M. Rogers, Surgeon-Major, 21st Regiment.

WHITCOMB.—On the 8th inst., at Richmond, Surrey, Henry M. Whitcomb, M.B. C.S.E., aged 46.

[N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages and Deaths.*]

BOOKS ETC. RECEIVED.

Dr. C. H. Schaible: The Systematic Training of the Body.
A. Doyon: Annales de Dermatologie et de Syphilographie.
Dr. Bucknill: Habitual Drunkenness and Insane Drunkards.
Dr. J. P. Cassells on Teaching the Dumb to Speak.
J. Hutchinson: Illustrations of Clinical Surgery. Part XII.
Dr. C. B. Fox: Sanitary Examinations of Water, Air, and Food.
Dr. A. M. McLane Hamilton: Nervous Diseases—their Description and Treatment.
Guy's Hospital Reports. Vol. XXIII.
T. Sympson: A Short Account of the Old and of the New Lincoln County Hospitals.
Clinical Work. April.
The Ecclesiastical Art Review. August.

Notes, Short Comments, and Answers to Correspondents.

THE CITY SCHOOLS.

THE remarks recently made by Dr. Abbott, the Head Master of the City of London School, at the annual gathering for the distribution of prizes, on the conditions affecting the health of the boys attending the school, ought not to pass unnoticed, since similar observations may be said to apply more or less to all our large City schools, and the problem of improving the hygienic conditions of the City-reared lads who attend them is of the highest importance. Breathing the confined air of small, overcrowded, ill-ventilated class-rooms, and want of exercise, are the two great evils the City schoolboy has to contend against. The high value of land in the City has prevented the natural growth of the schools to meet the requirements of the day, and the increased demand made on their previously limited space by the ever-increasing influx of students. With the exception of Christ's Hospital, and its neighbour, the Merchant Taylors', which has been fortunate in securing the spacious grounds vacated by Charterhouse, none of our City schools have anything worthy the name of playground within their precincts, at the most only a paved court-yard, or sometimes only a vestibule lighted artificially by reflectors. Such a state of things is most deplorable, and is injurious not only to the health of the boys at the present moment, but also to their future moral and mental as well as physical development. These considerations ought to impress the authorities responsible for the management of these schools with the necessity of removing them from the crowded parts of the metropolis to more airy situations in the suburbs. As a very large proportion of the boys attending these schools come into the City daily from quite distant suburbs for the purpose of instruction, the removal of the schools nearer their homes would be a convenience; whilst there can be no doubt that the daily exodus into the purer air and fresher surroundings of the country would prove an immense boon to the smaller class of City lads. Nor need the expense of transit prove a difficulty, for the sale of the City estate ought to prove sufficiently remunerative to allow the authorities to make an allowance in each case for travelling expenses, whilst giving an ample margin for the expense of removal and reconstruction. If the City Companies happily become impressed with the expediency of undertaking the wholesale removal of their respective schools, we would suggest that they should act concordantly, and distribute the new school buildings in fair proportions on the chief lines of suburban railways, so that each district of the metropolis might be equally benefited. In the meantime, till some such scheme can be effected, we would urge the City authorities to pay all possible attention to the efficient ventilation of the existing buildings, and to economise their limited space by a judicious distribution of boys in the respective class-rooms, and thus show they are not altogether negligent of the important trust committed to them.

Mr. Priestley Smith's paper will appear in an early number.

COEXISTENCE OF SCARLET FEVER AND CHICKEN-POX.

To the Editor of THE LANCET.

SIR,—As I never heard of the coexistence of scarlet fever and chicken-pox in the same person, I venture to submit to your notice the following case.

On the 30th of August last I was called to see a boy, aged four years, suffering from a mild attack of scarlatina anginosa. He progressed favourably for a week, when he had a sudden attack of pyrexia, for which I could ascertain no cause until Thursday last, when he was covered with a copious eruption of varicella, which is passing off in the usual way. The child is desquamating freely.

Yours faithfully,
Dewsbury, August 10th, 1878. WILLIAM SKENE, M.D.

Persevere.—We are obliged for the communication and extract; but have not space to devote to the subject, which has already been discussed from another stand-point.

Armagh.—1. Walshe (last edition).—2. Balfour or Hayden.

AFRICAN OPIUM.

THE prospects of the successful cultivation of the *Papaver somniferum* in Eastern Africa would appear from late accounts to be highly favourable. The *Cape Argus* states that the seeds of the best kinds of this poppy have been imported from Malwa into Mozambique, where 50,000 acres of uncultivated State land have been granted to a company with a capital of £178,000 for the purpose of cultivating and trading in opium. Besides the grant of land, the company also receives from the State the "exclusive right for twelve years to export opium free of duty through all the custom houses of the province."

Mr. Skegg.—The fee charged was much too small if accurately reported.

SEA-SICKNESS.

To the Editor of THE LANCET.

SIR,—In the article by Dr. Leeson in your impression of July 27th, "On the Use of Nitrite of Amyl in Sea-sickness," he says: "There are two theories about sea-sickness. One that it is owing to the food tossing about in the stomach, and teasing it and the diaphragm with its jactitations, nausea and vomiting being the natural consequence; the other that the stomach has nothing to do with it, its cause being a congestion of the brain and cord, which acts in a reflex manner on the stomach." Dr. Leeson does not seem to pin his faith particularly to either of these theories, nor can I say that I do. If the former of these theories be correct, why do we not see vomiting caused by other modes of travelling?—some by which the contents of the stomach must be considerably more tossed about than in travelling by sea. For instance, in railway travelling, either at a high speed on a well-constructed line, or at a low rate on a badly constructed one, by horse exercise, or driving in vehicles on rough roads, but we do not hear of sickness from such causes. If the latter theory be correct, and the sickness is sympathetic from "congestion of the brain and cord," we should expect the vomiting to be of a sympathetic character. But is it so? Dr. Tanner, in his "Index of Diseases," gives the difference between gastric and hepatic vomiting and cerebral and sympathetic vomiting. I have made use of this arrangement below to show that sea-sickness is not cerebral or spinal in character.

In cerebral vomiting there is little or no nausea, but that cannot be said of sea-sickness; for who, after having once experienced the feeling of nausea accompanying sea-sickness, can ever forget it!

The matters vomited in cerebral vomiting generally consist of unaltered food; but the vomit of sea-sickness undoubtedly contains bile, as may be known from the intensely bitter taste. In cerebral vomiting the appetite remains, and there is frequently a desire for food immediately after vomiting; but in sea-sickness all appetite is gone. Dr. Tanner says that "after cerebral vomiting there is little or no fatigue or faintness"; but there is usually a good deal of exhaustion after a severe attack of sea-sickness.

Now, in thinking the matter over, it has occurred to me—I do not know whether the view has been advanced before—that sea-sickness is caused in many cases by the passage of a quantity of bile into the stomach. If such be the case, a person suffering from sea-sickness is suffering from an artificial attack of gastric catarrh, and I think that those who suffer from "bilious attacks" will recognise a similarity in the sensations.

I once read a letter somewhere, I believe in THE LANCET, from a gentleman who always suffered from sickness on travelling by sea, but who was advised by an old sailor to wear a tight belt round the body. He took his advice, and never suffered afterwards. Dr. Tanner also advises the use of a belt. It seems probable that the effects of the tight belt are purely mechanical, and from pressure over the pyloric end of the stomach the passage of bile is prevented.

I am, Sir, yours obediently,
ALFRED KEBBELL, M.R.C.S. Eng.

Flaxton, York, August 6th, 1878.

Candidate.—1. Dr. Henry A. P. Robertson, Public Vaccination Station, Peter-street, Bristol.—2. Seaton's "Handbook of Vaccination" (Macmillan and Co.), and Fry's "The Law relating to Vaccination" (Knight and Co.)

NEGLECTED STREET DIRT.

To the Editor of THE LANCET.

SIR,—I beg to call your attention to the vile condition of Lower Thames-street, near Billingsgate Market. The gutter alongside the Custom House gets full of filthy bilge-water from the melted ice of the morning fish-vans, which lies there and putrefies all day till the stench is something dreadful, as bad as any cesspool. To-day the stench has been intolerable; the windows could not be kept open for it. The new market is scrupulously cleansed at night, and well washed down with water from a hose, but the street around is left in a dreadful condition. I know that it would be difficult to cleanse it completely when blocked with waggons; but there is scarcely ever an *attempt* to cleanse it during the day. Sometimes a man or boy goes poking about with a broom, and turns over the slush into heaps here and there; but this makes the stench so much worse that all the windows here have to be immediately shut up to keep it out. Rotten fish and baskets and barrels of them are also frequently thrown down in the road, and lie there rotting for hours. It is a common thing for fish to be emptied out of the baskets after purchase on to the pavement or into the gutter for division; or, while completing purchases in the market, the fish already purchased will be laid along by the wall on the pavement in this slush. I have seen fine halibut three or four feet long and great sturgeon laid in this slush, and almost as dirty as the mud. No doubt this vile putrefying filth never gets properly cleansed from the fish, and *is a frequent unsuspected cause of disease*, and therefore I have troubled you with this letter to call public attention to the matter that it may be speedily remedied.

I am, Sir, yours respectfully,
Custom House, August 9th, 1878. A CUSTOMS CLERK.

PUBLIC HEALTH IN SYDNEY.

THE quarterly report of Dr. Dansey, the health officer of Sydney, is not flattering to the sagacity and energy of the municipal authorities of the capital of New South Wales, from a sanitary point of view. Typhoid fever, he says, "has been ravaging all parts of the city, and scarcely a suburb has escaped without giving its quota to the number of deaths caused by this disease." The epidemic he attributes to bad water, exhalations from cesspits, defective sewerage, &c. Dr. Dansey complains that the water supplied to the inhabitants of Sydney is unfiltered, and believes that the health of the people would be greatly promoted by the enactment of a law to ensure the provision of efficient drainage in connexion with every building, both public and private. It is satisfactory to find that the inhabitants of Sydney are not disposed to tolerate this primitive state of things, and that, according to the *Colonies and India*, frequent public meetings have been held with the view of urging the Government to make determined efforts to remedy the evils which are working so disastrously against the physical well-being of the community.

Dr. Whalley.—The paper is under consideration.

THE EXAMINATION IN PHYSIOLOGY AT THE LONDON UNIVERSITY.

To the Editor of THE LANCET.

SIR,—Most heartily do I endorse the opinion of your correspondent, "A Teacher," in your issue of last week, that the examinations at the University of London have become "a game of chance."

In the particular examination referred to, the point first to be considered is, I apprehend, Had the examiner the right to put the particular question objected to? It is clear, from the printed Regulations of the University, he had not, and his doing so proves either an absence of a due sense of fairness, or ignorance of the duties he is called upon to perform, and in which therefore he should be more carefully instructed.

Speaking generally, and in reference to all the examinations at the University of London, I would ask why, Sir, should it be necessary for the candidate to be intimately acquainted with the examiner's own books and individual notions? Surely the subjects of examination are broad enough to enable any sensible examiner to test a student's knowledge by questions the answers to which may be found in any of the standard text-books, supplemented by oral teaching. From the statement of "A Teacher," it is evident that, although knowledge of Dr. Carpenter's book or of Professor Foster's may bring nothing but failure in the examination in Physiology, and I am quite sure that a similar statement may be made regarding the subjects of other examinations, particularly those of the Preliminary M.B. Scientific, I mean to say that a sound, general, and even extensive knowledge of these subjects may be of no avail in an examination. The examiner's peculiar notions (whether received as established facts or not) must be known, carefully picked out from his books, or success is unattainable. When this fact is taken into account with another—namely, the change from time to time of examiners,—the result of an examination does indeed become "a game of chance." Looking over a series of questions for some time past, one is struck with the narrow and pettifogging character of many of them—taking up some obscure and unimportant point, and leaving untouched the great principles of the science a knowledge of which these questions are supposed to test. Are there, Sir, no means by which examiners can be controlled, or are they altogether irresponsible?

No doubt some sort of special aptitude is needed to make a good examiner, as is the case with a good teacher; and I am here reminded of a saying attributed to Lord Melbourne, that if a man had anything asinine in his composition it was sure to show itself if he were appointed a magistrate. It appears to me that much the same thing may be said of a man if he be appointed an examiner at a University.

I am, Sir, your obedient servant,
August 13th, 1878. A CONSTANT READER.

Mr. Mathew S. Aitken.—There would probably be a technical legal claim; but under the circumstances it would be ungracious to press it.

GUNSHOT WOUND OF THE LEG.

To the Editor of THE LANCET.

SIR,—In THE LANCET of August 10th you have an interesting case of gunshot wound of the leg, under the care of Mr. Reginald Harrison at the Liverpool Royal Infirmary, and also some judicious remarks of his on the great care necessary in finding out what becomes of the component parts of a charge by complete examination of the wound, to which I would add *sometimes distant* parts. He will, and I hope others of your readers, be interested in the brief recital of a case that occurred to me some years ago.

I was sent for in the evening to see a young gentleman, who, in climbing out of a pit or ditch, had had his gun discharged against one leg. There was a short transverse wound from the front to the back part of the leg over the tibia. Here was a wound of entrance and exit, and one felt that the charge had made its way through and disappeared in earth or air. But not so. He complained of some stiffness and soreness on the front of the thigh on the same side. I pulled up his trousers, and found the charge of shot lodged under the skin in the front of the thigh, and cutting down to it removed it *en masse*. The fact was he had received the charge when the leg was bent up in contact with the thigh, and it had taken a straight course across the front part of the leg, across the small intervening space between the leg and thigh, and into the latter, which anyone can readily understand if he bends his knee upon his thigh to the fullest extent possible, when a straight line drawn across will show the mode of traverse.

I am, Sir, yours truly,
W. W. MOXHAY,
Reading, August 10th, 1878. Surgeon, Royal Berks Hospital.

Mr. Peter Giles, junior.—1. A medical practitioner is not compelled to report any outbreak of infectious disease coming under his observation to either the medical officer of health or inspector of nuisances, unless there is a Local Act of Parliament requiring this operating in his locality.—2. Taking the case as stated by our correspondent, it is most probable that no law was violated.—3. Medical officers of health are not, by virtue of their office, exonerated from practising the ordinary courtesies of the profession in their relations with their professional brethren. Indeed, medical officers of health are in a special manner called upon to exercise these courtesies. It is incumbent upon them not to express opinions upon cases which they may see, and which are under the care of other medical men, until after consultation or correspondence with the medical man in charge.

Mr. Gore.—Soon.

HERPES ZOSTER.

To the Editor of THE LANCET.

SIR,—Having read the communication of your correspondent, Dr. Pearse, on the above subject in your last issue, I think, were the case he describes under my care, I should be inclined to try the administration of the tincture of Gelseminum sempervirens, which in my hands has acted almost like a charm in cases of neuralgia. I have never used it in such a case as Dr. Pearse mentions; but I have found it almost invariably give relief in cases of facial neuralgia, whether dependent on exposure to cold or carious teeth. The dose I prescribe is from fifteen to twenty minims, combined with the same amount of spirits of chloroform, every three or four hours until relief is experienced. The second or third dose, as a rule, relieves the suffering. Should the above treatment fail, I would try the hypodermic injection of morphia.

I am, Sir, yours truly,
EDWD. A. PIGGOTT, L.R.C.P. Ed.
Shepherd's-bush, W., August, 1878.

To the Editor of THE LANCET.

SIR,—In answer to your correspondent's letter of inquiry upon the treatment of pain during and after the eruption of herpes zoster, I have found the application of finely-powdered acetate of lead and calamine powder in equal parts allay the irritation, and a saline acidulated mixture, to be taken with a few drops of wine of colchicum, if attended with much pain, to be most beneficial.

I am, Sir, yours faithfully,
Sackville-street, August 14th, 1878. JAMES STARTIN.

*** Dr. Campbell, of Lewisham, suggests the exhibition of twenty-five-grain doses of muriate of ammonia three times daily for three or four days, followed by a short course of saccharated carbonate of iron in ten-grain doses. Dr. Thos. Hughes, of Llanberis, writes, recommending hypodermic injections of morphia, and that the patient should take cod-liver oil.—ED. L.

CURIOUS METHOD OF TREATING HYDROPHOBIA IN MEXICO.

THE following is communicated by the daughter of a medical man. The lady is eighty-three years of age. The directions were given to her father:—

"The person under the influence of the disease must be well secured, that he may do no mischief either to himself or others. Soak a rennet in a little more than a half-tumbler of water for about five minutes; when this has been done, add of pulverised savadilla as much as may be taken up by the thumb and three fingers. Mix it thoroughly, and give it to the patient (that is, force it down his throat in the interval between the paroxysms). The patient is then to be put into the sun if possible, or placed near the fire, and well warmed. If the first dose tranquillises him after a short interval, no more is to be given; but if he continue furious, another dose must be administered, which will infallibly quiet him. A profound sleep will succeed, which will last twenty-four or forty-eight hours (according to the strength of the patient's constitution), at the expiration of which time he will be attacked with severe purging and vomiting, which will continue until the poison be entirely ejected. He will then be restored to his senses, will ask for food, and be perfectly cured.

Dr. Carey.—Mr. Millar's useful little volume, "Hints on Insanity" (Renshaw) will supply all the information about laws relating to lunatics, and the way of dealing with such cases.

Mr. Philip Taylor can enter as a student at Moorfields.

"STIMULANTS IN THE TREATMENT OF PNEUMONIA."

To the Editor of THE LANCET.

SIR,—Will you kindly correct an error in the temperature of the case which appeared in your issue of August 3rd, to which my attention has been drawn by Dr. Staines in to-day's LANCET—viz., for "90°" on the 26th and 27th January, read "99°." Yours truly,
Redhill, August 10th, 1878. A. R. WAGHORN, M.D.

Gamma.—We cannot undertake to determine the professional status of the degrees in medicine granted by different Universities.

Dr. William Stewart, (Barnsley.)—The paper has been received, and is marked for insertion.

C. H. should apply to a magistrate.

"CARBOLIC ACID IN SMALL-POX."

To the Editor of THE LANCET.

SIR,—Would your correspondent, Dr. T. Paterson, kindly inform me and your readers generally the exact quantity of carbolic acid he has been in the habit of using for his solution? Yours &c.,
August 10th, 1878. F.R.C.P. Edin.